



Rhode Island Airport Corporation

Residential Sound Insulation Homeowner Handbook

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Rhode Island Airport Corporation

DEAR
HOMEOWNER

This booklet provides an overview of RIAC’s Residential Sound Mitigation Program.

Dear Homeowner,

This booklet provides an overview of Rhode Island Airport Corporation’s (RIAC) Residential Sound Mitigation Program. In it you will find information about:

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Please review this booklet and discuss it with your family. If you have any questions which are not addressed in this information packet, please contact our Residential Sound Mitigation Staff at the Program Field Office located at 2248 Post Road in Warwick, R.I.

Our Phone Number is (401) 732-8320.

We look forward to your participation in T.F. Green’s Residential Sound Mitigation Program!





PROGRAM BACKGROUND

To date,
Over 1,200
homeowners have
participated in our
program.

Have you heard about T.F. Green's Residential Sound Mitigation Program?

The Rhode Island Airport Corporation (RIAC) has a longstanding commitment to minimizing the effect of aircraft noise on the community. RIAC has assisted over 1,200 homeowners in the Warwick community through its extensive sound mitigation program dating back to 1991. Currently a Sound Mitigation effort is underway for residential properties which are eligible for treatment under Federal Aviation Administration (FAA) guidelines.

RIAC will provide the architects, engineers, acoustical specialists, contractors and the materials and labor to complete the Sound Mitigation improvements. Acoustical treatments may include door and window upgrades, as well as improvements to some existing wall and ceiling assemblies. To permit year round enjoyment of the Sound Mitigation upgrades, fresh air ventilation or air conditioning may also be provided by the program.

The work of this FAA-sponsored program is, however, limited to improvements which reduce aircraft noise levels in the home. The available improvements range from general weather-stripping and sealing of your home, to new ventilation systems and the installation of special acoustical products. Specific treatments for your home will be determined after you sign up for the program and the specialists visit your home. Structural repairs, deferred maintenance items, home renovation work, or weatherization needs which are not directly related to noise reduction are not eligible under federal guidelines.



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Did you know T.F. Green's Residential Sound Mitigation Program is moving into a new phase?

According to the airport's most recent noise maps, 561 single family homes and 351 multi-family units are within the eligible program area which includes a forecast of the runway extension. RIAC is planning a grant with the Federal Aviation Administration (FAA) to cover the costs of design and construction for the next phase of the Sound Mitigation Program. As one of the homeowners who is potentially eligible for participation in this phase, we have prepared this *Homeowner Information Booklet* for you so that we can:

- **Familiarize you with our program goals;**
- **Introduce our program consultant;**
- **Share some innovative ideas** our consultant has developed to make the process as smooth as possible, and;
- **Describe a Sound Mitigation process** which is designed to maximize acoustical benefits to you, the participating homeowner.





PROGRAM GOALS

The purpose of the Residential Sound Mitigation Program is to reduce the noise level inside your residence.

Our Goals will focus on you -- the Homeowner

The purpose of the Residential Sound Mitigation Program is to reduce the noise level inside your residence. The program will provide modifications to your residence to ensure that this program meets Federal Aviation Administration (FAA) noise reduction guidelines. These guidelines specify technical acoustical requirements which the program will meet with the acoustical treatments recommended for your home.

We are happy to report that acoustical products are now on the market which are user friendly and achieve an appropriate architectural “fit” with residential properties found throughout the neighborhoods surrounding T.F. Green Airport. For example, a vinyl composite window or a wood clad window with storms featuring proven acoustical performance as well as low maintenance and “tilt-in” design for easy cleaning, are available for homes that qualify for window treatments.

Keeping the best interests of program participants’ in mind, and to stay in step with improvements in the acoustical products, RIAC is focusing on product quality and homeowner satisfaction. At the same time, we are seeking ways to improve efficiencies in the design and delivery process to minimize the impact to you and to achieve cost effectiveness in order to stretch our grant dollars to more homeowners.

Toward these ends, we are striving to make you well-informed participants in the process, and provide you with a greater range of choices for the best available acoustical treatments for your home. Our program goals are to:

- **Maximize homeowner satisfaction** with the program through information and choice; and,
- **Maximize the cost effectiveness** of the program while maintaining the quality of products, construction, and resulting acoustical performance.



PROGRAM CONSULTANT

The Jones Payne Group has completed Sound Mitigation treatments to nearly 30,000 units of housing at airports throughout the country.

Meet The Jones Payne Group

We are pleased to introduce you to The Jones Payne Group – our program consultant for RIAC’s Residential Sound Mitigation Program. The Jones Payne Group is a full-service architecture and planning firm with extensive experience in residential Sound Mitigation. The Jones Payne Group has completed Sound Mitigation treatments to nearly 30,000 units of housing at airports throughout the country, including Boston, San Jose, Cleveland, Toledo, Nashville, Baton Rouge, Portsmouth, Phoenix, Pittsburgh, Knoxville, Columbus, Hartford, San Diego, Ft Lauderdale and Charlotte. The Jones Payne Group also assisted RIAC in sound insulating over 1,200 properties here in Warwick. The Jones Payne Group, which is located in Boston, has worked with the FAA New England region since 1984, and has experience working with RIAC’s primary Sound Mitigation contractors and window suppliers through other Sound Mitigation programs. The Jones Payne Group maintains a professional staff of 45 people whose primary focus is on Sound Mitigation programs nationally.

The Jones Payne Group, which will provide program management, architectural, construction administration and resident inspection services for the project, has assembled a team with whom they have worked extensively in the past. Harris, Miller, Miller & Hanson, is the team’s acoustical consulting firm. The W.D. Schock Company will provide homeowner liaison services, Aztech Engineers, Inc. will provide mechanical and electrical engineering and Steere Engineering Inc. will provide structural Engineering for the project. R.I. Analytical will provide Environmental services. Commonwealth Land Title Insurance Co. will conduct title searches and filing of avigation easements.





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The Jones Payne Team will:

- Meet with you to discuss the program and to document existing conditions in your home;
- Coordinate with the acoustical consultant to evaluate interior noise levels in your home to determine if your home is eligible for acoustical treatment;
- Prepare an acoustical treatment plan for your home and meet with you to discuss;
- Prepare construction documents for selection of a contractor through a publicly-advertised bid process;
- Provide daily and weekly observation of the construction work in your home from start to finish;
- Perform acoustical testing after construction to confirm that FAA noise reduction goals have been achieved should your home be selected for testing.





PROGRAM TOOLS

The Jones Payne Group's Weaver PRM system will enable RIAC to track homes from application to closeout.

Program Innovations – Our Consultant's new ideas...

Program Management– To properly manage RIAC's continuing Residential Sound Mitigation Program, our consultant will be implementing an electronic file for your home. Information from homeowner applications will be entered into the system, along with information collected at the assessment visit and throughout the design and construction process. Jones Payne's WeaverPRM web application will enable RIAC to track homes from application to closeout, with summary information on cost, acoustical performance, product selection, homeowner preferences and level of satisfaction.

Centralized Homeowner Resources– Another key component of Jones Payne's approach will be to centralize program resources to better inform homeowners about the program. A Homeowner Liaison coordinator will be available to answer any questions about the program, and this homeowner handbook has been produced for your use. In addition, the consultant's entire staff is trained in all aspects of the Sound Mitigation process. Our process should result in your being well informed and an effective partner with RIAC throughout the design and construction process.

Selected Acoustical Testing– As we move into the next Phase of our program, our consultant will continue a process of "selectively" testing the homes of our participants. The FAA now requires RSI programs to determine interior noise levels of homes based upon a sample testing of typical categories of homes. Where homes do not fall within a "typical" category, or where construction is non-standard, the team will perform additional sound testing. Selective testing will lower overall program costs, while meeting the proper design and performance certification requirement of the FAA.

Efficient Information Collection– Our consultant has evolved a fast and efficient data collection system for use while visiting your home. This process includes drafting plans of your home and documenting window and door types; size of openings; construction details and related comments. When the team comes to your home for the assessment visit, they will document your house and print the created plans to review with you throughout the design process. This process helps us to minimize the time spent in your home and maintain our design schedule, enabling us to move from the assessment phase to the bid and construction process more quickly and with greater accuracy.



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Product Display Center

Interactive Design Process– We will work closely with you to ensure your understanding of the overall Sound Mitigation process, and to assist you in making your decisions regarding the selection of window and door styles and colors. During the assessment visit, the team leader will spend time with you reviewing what treatment approaches are recommended, your product selections, schedule, contractor selection, and any other issues you may wish to discuss. The architects will review your choices with you and answer any questions you may have. When you finalize your selections, your choices will appear in your homeowner agreement. As you can see, you will become an integral part of the design process.

User-friendly Products / Display Center– To provide you with the opportunity to experience current industry Sound Mitigation products first hand, RIAC is in the process of setting up a product display center at 2248 Post Road, Warwick.

Cost / Benefit Evaluation– We are “results oriented”, particularly when it comes to your satisfaction. Our consultant will be conducting a cost / benefit analysis of the program to ensure that we are meeting our program goals through appropriate Sound Mitigation treatments. RIAC’s overall program objective is **“to extend the sound mitigation program to all eligible, interested homeowners”**. Toward this end, it is very important to carefully balance our program costs and acoustical benefits to maximize our use of program funds to serve all noise-affected, residential properties.



KEEPING YOU INFORMED

RIAC is committed to frequent updates on the status of the Sound Mitigation efforts at T.F. Green Airport.

How will we keep you informed? – Community Outreach and Liaison

Once your home is determined to be eligible for the program, how is it that you will be notified and, perhaps more importantly, kept informed throughout the entire process? Our consultant team will send applications to the homes designated for the next phase with details on how to respond. We will keep track of your progress from initial selection to receipt of application, through design and construction and project closeout. RIAC has sponsored a number of well-advertised community meetings for the runway extension and will be hosting future community workshops that will focus specifically on the Sound Mitigation program. You will be notified as they are scheduled.

RIAC is also committed to frequent updates on the status of the Sound Mitigation efforts through its email mailing list as well as providing information on the airport's website at www.pvdairport.com. We, of course, will maintain written correspondence with you as a program participant from your application through your warranty package and beyond. You are also always welcome to call our noise mitigation office at (401) 732-8320, Monday - Friday 8AM to 5PM.



RESIDENTIAL SOUND MITIGATION – THE BASICS

“Noise” generally refers to sound that is unwanted.

Loud music may be a wonderful “sound” to one person, but “noise” to another.

“Noise”

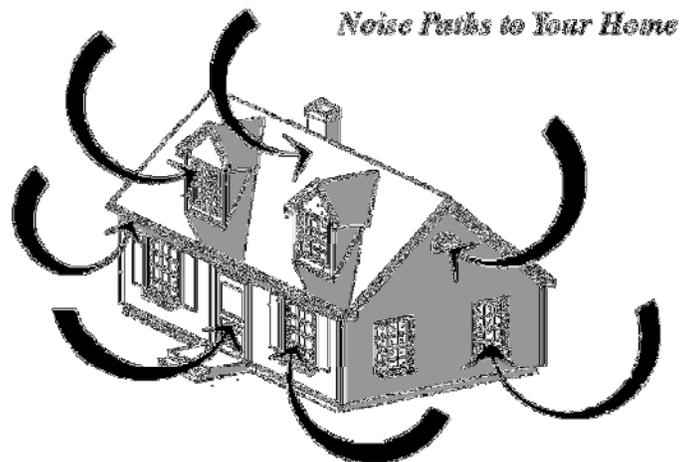
Noise generally refers to sound that is unwanted.

Loud music may be a wonderful “sound” to one person, but “noise” to another. Unwanted sound interferes with our normal day-to-day activities such as sleeping, conversation, or listening to television or radio.

Sound Mitigation refers to acoustical treatments that reduce noise inside the home. The particular noise that the program is concerned with is aircraft noise. The noise level in the home is determined by:

1. The noise source itself and whether it is generated by aircraft overflight, sideline noise, reverse-thrust or takeoff; and
2. The construction of the home and how well the walls, roof, doors and windows block noise from entering the interior spaces.

Some types of building structures provide better Sound Mitigation than others. For example, brick construction provides a better noise buffer than wood frame construction. However, since sound follows the path of least resistance, the most critical elements of sound insulating a home are penetrations in the home’s exterior surfaces such as windows, doors, and roof vents. Illustrated below are the typical noise paths into your home.





Acoustical Treatment Options

RIAC Residential Sound Mitigation Program treatment options vary depending on how well your existing home keeps out noise. Treatment to your home starts with sealing cracks and weather-stripping existing openings. If your home does not have a ventilation system we will evaluate how to get fresh air into your home while keeping the windows and doors closed to keep the noise out. Lastly, if it is determined that your existing windows and doors need to be replaced we will offer a complete building envelope solution that may also include wall and ceiling upgrades:



Interior view of a vinyl double hung window



Interior view of an arch top type prime door

- **Crack and Seal**– Houses which already have tight-fitting doors and windows may need little, if any, improvement. Sealing of existing windows, new weather-stripping on doors and other, minimal impact, sealing options like outlet and switch covers may be all that is needed.
- **Ventilation Systems**– The doors and windows need to be kept closed to minimize the noise entering the living space of your home. Fresh air is an important part of making that possible. If your home does not currently have a ventilation system, a system will be offered that will provide fresh air exchanges. Often, these systems include air conditioning to improve comfort as well.
- **Windows**– Under RIAC program guidelines, window treatments range from weather-stripping of existing windows to full window replacement with acoustically rated units. Based on conditions of your existing windows and their acoustical performance, it may be determined that simply adding weather-stripping and caulking to existing windows and window trim will upgrade them to a satisfactory level of acoustical performance. In other cases the removal of existing windows for replacement with new tight-fitting, energy-efficient, double-glazed windows may be appropriate. Storm windows might also be added, either at the factory or in the field, thereby creating a deep airspace that is effective in reducing noise infiltration. These windows, if manufactured as acoustically rated products, are called “composite” windows, featuring vinyl prime windows with high performance aluminum storm windows. A standard wood window with storm is also available that achieves the same acoustical performance while offering the look and feel of existing wood windows that you may want to replace.



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Exterior view of an arch type prime door and storm

- **Doors**– Doors, like windows, are considered possible noise paths into your home. Existing loose-fitting or light weight doors may be replaced with new tighter-fitting, solid core embossed steel doors. Storm doors may also be added or replaced, again to provide the concept of a deep air space at the opening. As in the case of windows, it may suffice to simply add weather-stripping and a door sweep to upgrade your doors.
- **Wall and Ceilings**- During the early phases of RIAC’s Sound Mitigation Program, additional construction was undertaken at certain wall and ceiling assemblies to either “de-couple” the exterior wall from interior walls by the use of double walls, or to add “mass” or surface weight to walls to improve acoustical performance. These treatments are recommended to selectively treat certain conditions in the home. This may include adding mass to inclined ceilings such as those found in raised ranches, capes, or rooms with non-standard construction. Based upon the architect’s assessment visit, we will discuss these possible additional treatments with you, if they are determined to be necessary, to provide the acoustical benefits to meet program objectives.



THE PROCESS – EIGHT KEY STEPS

Eight Steps:

1. Notification
2. Application
3. 1st visit
Assessment
4. 2nd visit
Review
5. Bid Package &
Bidding
6. 3rd visit
Contractor
Measurements
7. Construction
8. Post
Construction

STEP 1

Program Notification

RIAC will send you notification that your home has been selected as part of the current phase and will be evaluated for Sound Mitigation. A Program Application will accompany your notification letter.

STEP 2

Program Application

If you wish to be evaluated for participation in the Sound Mitigation program, fill out the Program Application and a short survey in which you will be asked about physical characteristics of your home and the way noise impacts the home environment. Please return both to RIAC in care of the Airport's Field Office located at 2248 Post Road, Warwick.

We will perform a title search of your property to verify that you are currently listed as the owner of the home. A title search is necessary as part of the process to attach a noise easement to the title of your property.

STEP 3

Assessment Visit (1st Visit) & Possible Acoustical Testing

The Jones Payne Team (about five people) will come to your home to discuss the program with you and evaluate the existing conditions of your residence. This first visit is an introductory one, and a time for us to answer your questions. The team leader will explain the general range of acoustical treatments to you. At this time we will not be sure if your home qualifies for new windows and doors, but we will ask you to make preliminary choices on window color, door styles & egress window locations. The technical team will need access to all areas of your home to document the existing conditions and will be collecting photos. Additional information from the acoustical engineers will be evaluated window and door treatments are recommended. The initial visit takes about an hour and 30 minutes, during which time the team will prepare floor plans and document door and window conditions.

For homes selected for acoustical testing, we will schedule another 45-minute visit for the acoustical consultant to test your home.



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General requirements

A wireless microphone system and a portable noise source will be used, which approximates the noise spectrum of a jet aircraft (though it is not as loud as an actual jet). Inside and outside microphones linked to an on-site computer provide important information about how well the existing windows and walls are keeping out the noise.

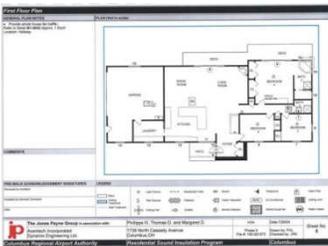
This testing will establish if your home is eligible for Sound Mitigation treatments based upon existing interior noise levels. There are two possible treatment options resulting from a determination of interior noise levels:

One, replacement windows/doors and mechanical/electrical treatments may be required.

Two, sealing of noise entry points through exterior walls and around doors / windows. Venting/ducting of fresh air into the home may also be provided.

STEP 4

Treatment Concept Package/ Homeowner Participation Agreement (2nd Visit Review)



Sample floor plan

Based upon the assessment visit findings and determination of interior noise levels, the Jones Payne Team will invite you to come to the program field office located at 2248 Post Road to discuss specific treatment recommendations for your home. At this time, a team representative will present a proposal which has been tailored to suit your home and address its particular noise problems. The treatments will be described in detail, along with how they will be installed and how they will affect the home. If necessary, you will be asked to finalize your selections of product styles, colors and finishes from a standard selection sheet. This second visit will take about an hour. At the end of the 2nd visit, you will know precisely what treatments are recommended for your home and you will be able to accept or reject recommendations, except if they would result in your home not meeting the required noise reduction goals.

Once you have decided on the treatments, at this 2nd visit interview, you will be asked to sign the Homeowner Participation Agreement and the Deed of Easement. We ask that you examine the documents carefully to ensure that you agree with the recommendations and understand the easement. Please note that no changes will be permitted after the agreement is signed since the bid documents and contractor's pricing are based on this agreement.





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**Contractor
measurement visit**

The Homeowner Participation Agreement does a number of things. It states exactly what treatments will be undertaken in your home. It defines certain obligations on your part, including providing access to the contractor during construction; being present (or having an authorized representative present) during construction; moving furnishings and window dressings to allow for the work to proceed; as well as performing certain building maintenance items, and/or correcting deficiencies that may prevent the treatments from being installed.

In exchange for the Sound Mitigation improvements in your home, RIAC will be seeking a signed Noise Easement (Deed of Easement) for the air space above your property. RIAC will file the signed Noise Easement with the Registry of Deeds at the start of the construction process for your home.

STEP 5

Bid Package and Bidding

After you have signed the Homeowner Participation Agreement and the Deed of Easement documents (Noise Easement), we will authorize the consultant team to proceed with the construction documents for your home. Your home, along with others, will be grouped together as part of a bid package to be publicly bid. The bid process is governed by Federal, State and Local regulations. RIAC will advertise the work for submission of bids by qualified contractors. Once received, RIAC will evaluate the contractor's bids and then based upon lowest responsive cost and related experience of the contractor, the contract will be awarded.

STEP 6

Contractor's Measurements (3rd Visit)

The program field office staff will contact you to arrange a visit to take final measurements for the specified materials for your home. To allow enough time for all the materials to be ordered, this meeting will be scheduled well before actual construction. This visit will take about 30-60 minutes depending on the number of acoustical treatments your house will be receiving. RIAC will file the Noise Easement after this visit.

Note: A member from the Jones Payne team will accompany the contractor during this visit and will be able to answer questions that you still might have about the construction process.



**Installation of a new
window**





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Final inspection

STEP 7

Construction

The contractor will be required to submit a schedule of dates of construction for each home. Staff from the program field office will contact you to ensure that there are no conflicts between the proposed construction schedule and any plans you may have. Once construction starts, the contractor has up to 10 consecutive working days (not including weekends and holidays) to complete the work. The Jones Payne Team will provide a resident inspector to make observations of work on a continual basis throughout the construction process. Jones Payne will also inspect the work to ensure that it meets program standards. After the contractor has completed the work they may need to return to your home in order to correct minor work items that the inspector notes. These items, known as “punch list” items, are not included in the 10-day work period, so expect to see the contractor back for some additional short visits. When the contractor has completed the “punch-list” items, our consultant will conduct a final inspection.

STEP 8

Post-Construction

After final completion of the home, those homes previously selected for acoustical testing will receive post-construction testing for comparison with pre-construction results to ensure that the noise reduction goals were met. In addition, we would like you to complete a Post-Construction Survey and return it to RIAC field office after the final inspection takes place. RIAC and the contractor will be providing you with a Warranty Package, which sets forth the contractor’s and product warranty information.



FREQUENTLY ASKED QUESTIONS

“Are there any costs to me?”

No. RIAC and the FAA cover all the costs associated with the Sound Mitigation work, including materials and labor.

Who decides what work will be done to my house?

The Sound Mitigation recommendations for your home will be prepared by RIAC’s program consultant team and presented to you for your approval. The proposed improvements will be based upon existing conditions in your home, existing interior noise levels, construction type, building code restrictions, acoustical criteria, and through consultation with you.

Are there any costs to me?

No. RIAC and the FAA cover all the costs associated with the Sound Mitigation work, including materials and labor. All work will be completed to a finished condition similar to the condition of the home before the work is started. If your home receives mechanical upgrades, the program will cover all associated installation costs; however, the cost of operating the system must be borne by you. There are situations with adjacent materials, finishes and code requirements that you may need or want to update at your expense. Any costs related to changes in window dressings (such as shades curtains or blinds etc.) or mountings due to adjustments in window sizes as well as finish painting / wall papering outside the construction area will be your responsibility since the FAA does not cover these costs. Additionally, the Warwick Building Department may require some code updated that are to be completed by you at your own expense. All of these situations will, if applicable to your home, be identified before you sign the homeowner agreement.

Will air conditioning be provided?

The benefits of Sound Mitigation treatments are reduced when doors and windows are left open. In order to provide the benefits of Sound Mitigation treatments, and to provide comfortable conditions in your home during the summer, an air conditioning system that also accommodates indoor air-quality requirements, may be installed with the Sound Mitigation package if your home does not already have one. Existing forced air systems may be modified to accommodate air conditioning



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**Homeowner Liaison
answering questions**

Will the program reimburse you for the windows and doors you recently installed?

Unfortunately, RIAC cannot reimburse you for your new doors and windows. The FAA's policy does not consider work done by the homeowner to be eligible for reimbursement.

Who does the work in my home?

The work is bid under public bidding laws. General contractors who are qualified for bidding must meet RIAC's qualification criteria. The contractor submitting the lowest, most responsive price is awarded the job. You should be aware that most of the contractors who are working with RIAC have specialized in Sound Mitigation projects, and bring with them a long track record in similar programs.

How long does the work take?

The installation of the Sound Mitigation treatments will take up to 10 working days to reach substantial completion. (A residence is considered "substantially complete" when all of the products have been installed). When substantial completion has been reached, the resident inspector will make an appointment to inspect all of the work. The inspector will create a "Punch List" noting all the items that require adjustment, repair or replacement. The contractor will then make an appointment to address any items that the inspector has noted. After the contractor has completed all the "Punch List" items, the inspector will make another appointment to schedule a final inspection. After the final inspection is completed and the program architect has signed off on all of the work, your residence is complete. You will then receive a warranty package.

PLEASE NOTE: You, the owner, or an adult representative designated by you, must be present in the house while the work is being performed



PROGRAM GUIDELINES

Meeting the eligibility criteria outlined in the “Program Guidelines” will allow you to participate in our program.

This section provides an overview of the guidelines for the T.F. Green Airport’s Residential Sound Mitigation Program, including eligibility requirements, design guidelines and procedures during construction.

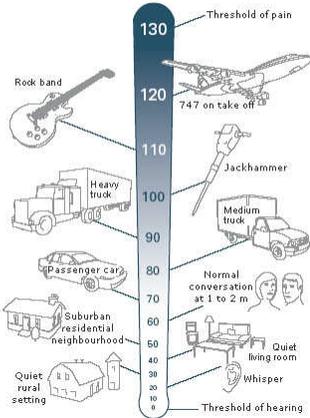
Program Eligibility

In order to participate in RIAC’s Residential Sound Mitigation Program, the following requirements have been established to determine if a particular residential dwelling meets the criteria for program eligibility:

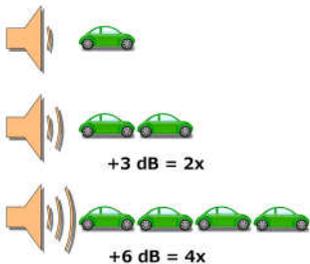
- Property must be residentially zoned in the City of Warwick, and be used for residential purposes.
- The residence must be located within the DNL 65 noise contour as projected for 2015 and as approved by the FAA.
- The average interior noise level of all habitable rooms must be greater than or equal to DNL 45 dB. (This will be determined by the program’s acoustical consultant.)
- The Residence must have been built prior to October 1, 1998 per the FAA’s regulations.
- The property must meet one of the following requirements.
 - a. The residence is a single family owner occupied residence.
 - b. The residence is a single family rental property.
 - c. The residence is a rental property consisting of no more than four (4) units.
- Since Sound Mitigation programs are not remodeling programs, participating homes must be free of major building code violations.
- Homeowners may elect to make some changes in the recommended acoustical treatment package set forth by the consultant team, but must be prepared to accept certain minimum modifications to ensure that the FAA noise reduction goals are satisfied.



DECIBEL SCALE (dBA)



Decibels use a logarithmic scale



5 Decibels noise reduction means less than half the noise

Design Guidelines

The T.F. Green Airport Residential Sound Mitigation Program has adopted THE FAA’s acoustical noise reduction criteria which state that a minimum noise reduction (NR) of 5 decibels is required for each residence. Acoustical treatments recommended for your home will be designed to meet these criteria.

Based on these basic acoustical objectives, the design team will be evaluating your home for current construction conditions and determining existing interior noise levels. During the design process, we ask your cooperation in observing the following conditions:

- For all visits made by the design team to your home, our staff at the field office will either call or write you to schedule appointments in advance of the intended visit. As you can imagine, we will have many homes to visit, but we will attempt to provide you with options to fit your schedule. All program representatives will present proper identification.
- The assessment visit will take about 1 hour and 30 minutes. The architects and engineers will be measuring doors and windows and will be checking attic and basement areas to determine installation requirements. They will also want to review the existing mechanical and electrical systems.
- During the architectural survey, the architect will notify you if any building code violations exist at your residence. If there are any violations, you will be responsible for correcting them before continuing in the Program. Typical violations may include such items as unsafe conditions (i.e. stairway with broken steps). It is RIAC and the FAA’s requirement that all homes meet current building codes in order to be included in the program.

EXCEPTION: The Rhode Island Building Code requires that in residential construction, one window in each bedroom must serve as a second means of egress in the event of an emergency. An “egress” window is a standard window that must meet certain “clear opening dimensions”. If one of your bedroom windows does not meet the minimum dimensions, we may need to enlarge the window opening designated to receive the egress window. During our visit with you, the program representative will indicate which window(s) may be enlarged.

NOTE: The program will bear all costs to install egress windows.





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Acoustic test Interior microphone



Acoustic test Speaker simulating aircraft noise spectrum

Since egress windows are a building code requirement, there is no option of accepting or rejecting egress window modifications. However, some building departments will allow us to designate a horizontal gliding acoustic window as meeting the egress requirement. The use of a horizontal gliding window as opposed to a double hung window (operates vertically), may eliminate the need to change or enlarge the opening.

- The acoustical consultant, who will only visit your home if it is selected for testing, will take about 60 minutes, on average, to sound test all living spaces (bedroom, dining room, living room, kitchen, etc.) in your home. An artificial noise source will be used to simulate aircraft noise. The noise will be played through a loud speaker for approximately 60 seconds so that simultaneous measurements can be made outside and inside your home to determine the resulting noise reduction of the existing construction. Since the interior of the home must be quiet, we will ask you not to use your TV, radio, etc. during the procedure.
- Depending on how your window dressings are mounted, you may have to modify some of the mounts to reinstall your shades on the new acoustical windows. Also keep in mind that the size of egress windows may be changed, which means your current window shades, blinds, shutters, awnings, etc. may not fit the new window.
- Correcting these items will be your responsibility, as it is not covered as a noise reduction element of the program.
- You will be presented with a selection of window and / or door style and color options during the second visit. We will be asking you to make these types of decisions during this meeting.
- As mentioned in the Homeowner Information Booklet, we may install an air conditioning system in your home. You do not have to use this system, or keep the windows closed (windows will not be acoustically effective if they are open). Remember, however, that use of the air conditioning system may increase your summer utility bill. This increase may be offset by a lower heating bill in the winter because experience shows that the house will be better insulated by the window / door treatments. The system will be presented to you during the second visit.



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Construction Procedures



Contractor taking care to protect homes

- All of RIAC's contracts for the Sound Mitigation program require the contractors to be insured, licensed, and bonded.
- In the Homeowner Participation Agreement, it states that you will be responsible for moving furnishings and window dressings. If you need help moving furniture, please make arrangements with a friend, relative, or neighbor prior to the day of construction. This is critically important in order to avoid any delays in construction, which may result from not having a clear work area provided to the contractors. Any questions about moving furniture may be asked at the second visit or discussed at the pre-construction walk through with the contractor.
- RIAC requires that the contractors take every precaution to protect your home and its contents. For example, the contractors will cover your floors and furniture. Of course, these coverings will be removed at the end of each day. If you are worried about protection of certain pieces of furniture or electronic equipment, please take time to additionally cover these items during the time of construction. You should remove and protect any china, glassware, fragile items or valuables to avoid the risk of damage. In addition, we strongly recommend that you protect stereos, televisions, computers, and any other equipment that may be sensitive to dust.
- Construction in any home is disruptive, and can, at times, get very messy. As part of the program, we try to take whatever measures necessary to minimize the disruption and mess. The contractors who will work in your home are required to keep all areas free and clear of debris, to use drop cloths, and to clean the work area at the end of each day. We ask that during the construction period you be tolerant of the changes that take place and prepare for a 10-day period of disorder. Past experience has shown that the lasting result of a quieter home more than compensates for this short-term disruption.

Upon completion of the work, you will be responsible for finishing interior painting at any non-modified wall, ceiling, or associated trim since the program does not cover these costs. For example, we may require that a new wall surface be installed at an exterior wall. That wall will be finished to match the existing condition. The other walls in that room may not match exactly. If you want to update them, that is your responsibility. Window and door trim will be reused wherever possible





PROGRAM FORMS



The forms contained in this section will be used throughout the program to aid in the administration of the program. A general explanation of the forms and their use in the program follows. Should you need further assistance regarding the forms, please contact RIAC Program Office at (401)-732-8320.

PROGRAM APPLICATION**

- Property
- Ownership data
- Mailing Address
- Tenant Information (if applicable)
- General Information
- Homeowner Certifications / Agreements

HOMEOWNER PARTICIPATION AGREEMENT

- Participation Agreement
- Acoustical Treatment Plans
- Avigation Noise Easement

HOMEOWNER SURVEYS

- Pre-Construction **
- Post-Construction

WARRANTY PACKAGE

- Contractor's 1 year warranty on workmanship
- Manufacturer's warranties on installed products

** The *Program Application* and *Pre-Construction Survey* forms are to be filled out and returned to RIAC Program Office, 2248 Post Road, Warwick, RI 02886 within two weeks of the post mark. Your attention and feedback is important to ensure that all eligible homeowners who wish to participate will receive treatment under the current program phase.



Rhode Island Airport Corporation

Congratulations!

You have completed the overview of RIAC's updated Sound Mitigation process. We hope that you now have an idea about the overall process and what you can expect if you apply for the program.

We look forward to your participation.

Every effort will be made to make your experience with RIAC's Residential Sound Mitigation Program a positive one. As you now know, the process is much more than one of simple construction. Sound Mitigation is different from normal renovation projects, and RIAC has structured the program to ensure that you are well informed about the treatments and why they have been recommended for your home. Included, for your convenience, is a "checklist" of the key steps in the process, along with space for you to fill in the dates they are scheduled or when they actually occur. We urge you to use this form to keep track of where you are in the process.





CHECKLIST

<i>Checklist</i>	Date Scheduled	Date Completed
Application Sent		
Pre-construction Homeowner Survey Sent		
Assessment Visit Scheduled		
Pre-construction Acoustical Test Scheduled (selective)		
2nd Visit Scheduled		
Homeowner Agreement Signed		
Contractor Measurements Scheduled		
Construction		
Construction Punch List Scheduled		
Final Inspection Scheduled		
Post-construction Survey Form Sent		
Post-construction Acoustical Test Scheduled (selective)		
Warranty Package Received		