



Building Planning Miscellaneous Provisions

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Course Information

Building Planning Miscellaneous Provisions
1 Hour General Credit
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Today's Training is Made Possible Through



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**BUILDING PLANNING
MISCELLANEOUS PROVISIONS**

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FLORIDA BUILDING CODE CHAPTER 3

- **Wind Design**
Ensuring the building can withstand high winds and gusts, including structural reinforcements and aerodynamic considerations.
- **Structural Design**
Designing the building's frame, foundations, and load-bearing elements to support the weight of the structure and any occupants or contents.
- **Fire Resistance**
Incorporating fire-resistant materials and systems to protect the building and its occupants in the event of a fire, such as sprinklers and fire-rated walls.
- **Egress**
Designing the building's layout and exits to allow for safe and efficient evacuation in an emergency, with clear signage and accessible pathways.
- **Flood Protection**
Implementing measures to protect the building from flooding, such as elevated foundations, drainage systems, and flood-resistant materials.
- **Miscellaneous Provisions**
Addressing other important aspects of building design, such as accessibility, energy efficiency, and environmental considerations.

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WHAT IS A HABITABLE ROOM?



Living Space
Spaces within a building intended for occupancy, such as rooms for living, sleeping, eating, or cooking.



Sleeping Area
Bedrooms or other designated spaces for sleeping and rest.




Dining and Cooking
Spaces designed for food preparation and consumption, such as kitchens and dining rooms.

Habitable spaces are the core living areas within a building, excluding auxiliary spaces like bathrooms, closets, and storage areas.

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**R303.1 HABITABLE ROOMS
LIGHT AND VENTILATION**

These rooms must have a minimum glazing area of 8% of the floor area to allow for natural light, and a minimum openable area of 4% of the floor area to provide natural ventilation. The building occupants must have ready access or control over these openings to the outdoor air.




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LIGHT AND VENTILATION EXEMPTIONS

- Habitable Rooms Glazed Areas**
For habitable rooms other than kitchens, the glazed areas need not be openable where the opening is not required by Section R310 and a whole-house mechanical ventilation system or a mechanical ventilation system capable of producing 0.35 air changes per hour in the habitable rooms is installed in accordance with Section M1507.
- Kitchen Glazed Areas**
For kitchens, the glazed areas need not be openable where the opening is not required by Section R310 and a local exhaust system is installed in accordance with Section M1507.

- Rooms with Artificial Lighting**
The glazed areas need not be installed in rooms where Exception 1 is satisfied and artificial light is provided that is capable of producing an average illumination of 6 footcandles (65 lux) over the area of the room at a height of 30 inches (762 mm) above the floor level.
- Sunrooms and Patio Covers**
Use of sunroom and patio covers, as defined in Section R202, shall be permitted for natural ventilation if in excess of 40 percent of the exterior sunroom walls are open, or are enclosed only by insect screening.

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GLAZED OPENINGS

Glazed openings in buildings must open directly onto a street, public alley, or a yard or court located on the same lot as the building. However, there is an exception for required glazed openings that face into a roofed porch, as long as certain criteria are met, such as the porch being at least 65% unobstructed and having a minimum ceiling height of 7 feet.

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SUNROOM EXCEPTION

Required glazed openings shall be permitted to open into sunroom additions or patio covers that abut a street, yard or court if in excess of 40 percent of the exterior sunroom walls are open, or are enclosed only by insect screening, and the ceiling height of the sunroom is not less than 7 feet.

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ADJOINING ROOMS

Definition

For the purpose of determining light and ventilation requirements, any room shall be considered to be a portion of an adjoining room where not less than one-half of the area of the common wall is open and unobstructed.

Opening Requirements

The opening between the adjoining rooms must be not less than one-tenth of the floor area of the interior room and not less than 25 square feet (2.3 m²).

Ventilation and Lighting

The adjoining rooms are considered a single space for the purpose of determining light and ventilation requirements, allowing the rooms to share these resources.

Common Wall


At least one-half of the area of the common wall between the adjoining rooms must be open and unobstructed to meet the requirements.

Flexibility in Design

This provision allows for more flexible and efficient use of space by treating adjoining rooms as a single unit for lighting and ventilation purposes.


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BATHROOM VENTILATION




Bathroom Glazing Requirement

Bathrooms, water closet compartments, and other similar rooms shall be provided with an aggregate glazing area in windows of not less than 3 square feet (0.3 m²), one-half of which must be operable.



Exception to Glazing Requirement

The glazed areas shall not be required where artificial light and a local exhaust system are provided.



Ventilation and Lighting Importance

Proper ventilation and lighting are essential for maintaining a comfortable and hygienic bathroom environment, even in the absence of natural light.

The building code ensures that bathrooms and similar spaces have adequate natural lighting and ventilation, or are provided with artificial solutions, to promote a safe and healthy environment for occupants.

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BATHROOM AND OTHER EXHAUST OPENINGS



Exhaust Openings

Exhaust air should not be directed onto walkways, as it can pose a safety hazard and create uncomfortable conditions for pedestrians.



Pedestrian Comfort

Exhaust air can make the walking environment unpleasant, causing discomfort and disrupting the intended use of the walkway.

By ensuring that exhaust openings are not directed onto walkways, building designers can prioritize the safety and comfort of the people using the space.

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MECHANICAL VENTILATION

• R303.4 Mechanical Ventilation

This code section outlines the requirements for whole-house mechanical ventilation in dwelling units with an air infiltration rate less than 3.00 air changes per hour when tested with a blower door at a pressure of 0.2 inch w.c. (50 Pa) in accordance with Section R402.4.1.2 of the Florida Building Code, Energy Conservation.

• Air Infiltration Rate

The air infiltration rate of the dwelling unit must be tested and verified to be less than 3.00 air changes per hour when tested with a blower door at a pressure of 0.2 inch w.c. (50 Pa).

• Whole-House Mechanical Ventilation

If the air infiltration rate is less than 3.00 air changes per hour, the dwelling unit must be provided with a whole-house mechanical ventilation system in accordance with Section M1507.3.

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OUTSIDE AIR INTAKE

• Intake Openings

Mechanical and gravity outdoor air intake openings shall be located at least 10 feet (3048 mm) away from any hazardous or noxious contaminant, such as vents, chimneys, plumbing vents, streets, alleys, parking lots, and loading docks.

• Exceptions

The 10-foot (3048 mm) separation requirement is not necessary if the intake opening is located 3 feet (914 mm) or greater below the contaminant source.

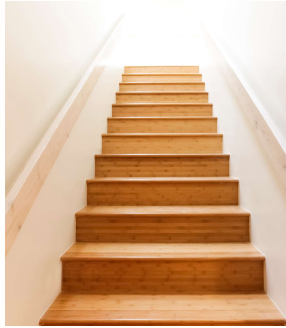
• Dwelling Unit Exhaust

The exhaust from dwelling unit toilet rooms, bathrooms, and kitchens shall not be considered as hazardous or noxious.

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STAIR LIGHTING

Interior stairways play a crucial role in building safety, ensuring that occupants can navigate stairs with ease and visibility. The building code requires that these stairways be equipped with artificial lighting to illuminate the treads and landings, providing a minimum of 1 footcandle (11 lux) of illumination at the center of each tread and landing with six or more risers.



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REQUIRED HEATING



Heating System Requirement

All dwelling units must have a heating system installed as per the building code requirements.



Minimum Temperature

The heating system must be capable of maintaining a minimum indoor temperature of 68°F (20°C) during the coldest months of the year.

Ensuring all dwelling units have a properly installed and functioning heating system is crucial for the comfort and safety of the occupants, as well as compliance with local building codes.

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MINIMUM ROOM AREAS



Minimum Habitable Room Area

Habitable rooms, excluding kitchens, must have a minimum floor area of 70 square feet (6.5 m²).




Minimum Room Dimensions

Habitable rooms, excluding kitchens, must have a minimum horizontal dimension of 7 feet (2134 mm).

These requirements ensure that habitable rooms provide adequate living space and proper dimensions for comfortable living.

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LOW CEILINGS



Ceiling Height Requirement
The building code specifies that portions of a room with a sloping ceiling measuring less than 5 feet (1524 mm) or a furled ceiling measuring less than 7 feet (2134 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required habitable area for that room.

In summary, the building code sets specific requirements for ceiling heights in habitable rooms, and areas with ceilings below the minimum heights do not contribute to the minimum required habitable area.

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MINIMUM CEILING HEIGHTS

- Minimum Ceiling Height**
Habitable spaces, hallways, and portions of basements must have a ceiling height of at least 7 feet (2134 mm).
- Bathroom and Laundry Ceiling Height**
Bathrooms, toilet rooms, and laundry rooms must have a ceiling height of at least 6 feet 8 inches (2032 mm).
- Sloped Ceiling Exceptions**
Rooms with sloped ceilings must have at least 50% of the required floor area with a ceiling height of 7 feet (2134 mm), and the remaining area must have a minimum of 5 feet (1524 mm).

- Shower and Tub Clearance**
Showers and tubs with a showerhead must have a ceiling height of at least 6 feet 8 inches (2032 mm) over an area of at least 30 inches by 30 inches (762 mm by 762 mm).
- Basement Obstructions**
Beams, girders, ducts, and other obstructions in habitable basement spaces may project to within 6 feet 4 inches (1931 mm) of the finished floor.
- Beam and Girder Clearance**
Beams and girders spaced apart by at least 36 inches (914 mm) may project up to 78 inches (1981 mm) from the finished floor.

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PLUMBING FIXTURE MINIMUM CLEARANCE

Fixture	Minimum Clearance
Water Closet	15 inches (381 mm) from center to any side wall, partition or vanity, 30 inches (762 mm) center-to-center between adjacent fixtures, 21 inches (533 mm) in front
Lavatory	
Bidet	

*International Plumbing Code (IPC), 2018 Edition


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BATHTUB AND SHOWERS

Bathtub and shower floors and walls above bathtubs with installed shower heads and in shower compartments shall be finished with a nonabsorbent surface. Such wall surfaces shall extend to a height of not less than 6 feet (1829 mm) above the floor.

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GLAZING IDENTIFICATION

**Identification Requirements**

Each pane of glazing installed in hazardous locations must have a manufacturer's designation that specifies the type of glass and the safety glazing standard it complies with.

**Label Permitted**

A label can be used in lieu of the manufacturer's designation.

**Designation Types**

The manufacturer's designation must be acid etched, sandblasted, ceramic-fired, laser etched, embossed, or a type that cannot be removed without being destroyed.

**Exceptions**

For non-tempered glass, the manufacturer's designation is not required if the building official approves a certificate, affidavit, or other evidence confirming code compliance.

The slide covers the identification requirements for glazing installed in hazardous locations, including the types of acceptable designations and the exceptions to the rule.

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UNTITLED #2

- Individual Glazed Areas**

Glazed areas, including glass mirrors, in hazardous locations as defined in Section R308.4 shall pass the test requirements of CPSC 16 CFR 1201. Glazing shall comply with the test criteria for Category II unless otherwise indicated in Table R308.3.1(1).
- Mirrors and Other Glass Panels**

Mirrors and other glass panels mounted or hung on a surface that provides continuous backing support are exempt from the requirements.
- Glass Unit Masonry**

Glass unit masonry complying with Section R607 is exempt from the requirements.

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SAFETY GLAZING IN DOORS



Glazing in Fixed Panels
Glazing in fixed panels of swinging, sliding, and bifold doors is considered a hazardous location.



Glazing in Operable Panels
Glazing in operable panels of swinging, sliding, and bifold doors is considered a hazardous location.



Decorative Glazing Exemption
Decorative glazing is exempt from being considered a hazardous location.

Glazing in doors must be carefully considered to ensure safety, with the exception of decorative glazing.

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SAFETY GLAZING ADJACENT TO DOORS



Glazing adjacent to doors
Glazing in an individual fixed or operable panel adjacent to a door is considered a hazardous location if the bottom exposed edge of the glazing is less than 60 inches above the floor or walking surface.



Proximity to door
The glazing is within 24 inches of either side of the door in the plane of the door in a closed position, or on a wall less than 180 degrees from the plane of the door in a closed position and within 24 inches of the hinge side of an in-swinging door.




Exceptions
Decorative glazing, glazing with an intervening wall or other permanent barrier between the door and the glazing, glazing adjacent to a closet or storage area 3 feet or less in depth, and glazing adjacent to the fixed panel of patio doors are exceptions to the hazardous location requirement.


Identifying and properly addressing hazardous glazing locations adjacent to doors is crucial for ensuring the safety of building occupants.

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SAFETY GLAZING IN WONDOWS




Pane Size
The exposed area of an individual pane is larger than 9 square feet (0.836 m2).



Distance from Floor
The bottom edge of the glazing is less than 18 inches (457 mm) above the floor.



Height from Floor
The top edge of the glazing is more than 36 inches (914 mm) above the floor.



Proximity to Walking Surfaces
One or more walking surfaces are within 36 inches (914 mm), measured horizontally and in a straight line, of the glazing.

These conditions define a hazardous location for glazing in windows, requiring additional safety measures to be implemented.

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GLAZING IN GUARDS AND RAILINGS



Glazing in Guards and Railings

Glazing used in guards and railings, including structural baluster panels and non-structural in-fill panels, is considered a hazardous location regardless of the area or height above a walking surface.



Hazardous Location

Glazing in these areas is deemed a hazardous location due to the potential risk of injury or accidents.



Structural vs. Non-Structural

The standard applies to both structural baluster panels and non-structural in-fill panels within guards and railings.

Designers and builders must be aware of the hazardous nature of glazing in guards and railings and take appropriate measures to ensure the safety of occupants.

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GLAZING IN WET AREAS



Glazing Within 60 Horizontal Inches

Glazing located within 60 horizontal inches of walls, enclosures, or fences containing, facing or adjacent to hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers, and indoor or outdoor swimming pools is considered a hazardous location.



Vertical Measurement of Glazing

The bottom exposed edge of the glazing must be less than 60 inches (1524 mm) measured vertically above any standing or walking surface.



Applies to Single and Multiple Glazing

This requirement applies to both single glazing and each pane in multiple glazing installations except for outboard sacrificial panes in laminated glass.

To ensure safety, building codes mandate specific requirements for glazing near wet surfaces, such as hot tubs, pools, and showers, to minimize the risk of injury.

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SAFETY GLAZING NEAR STAIRS AND RAMPS

The slide discusses the glazing requirements for areas adjacent to stairs and ramps, as specified in the building code. This is a safety regulation aimed at preventing hazardous situations by ensuring that the glazing is positioned at a safe height or is protected by a handrail.

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SITE ADDRESSES

• Address Identification Requirement

Buildings shall be provided with approved address identification that is legible and visible from the street or road fronting the property.

• Address Characters

Address identification characters shall be Arabic numbers or alphabetical letters, not less than 4 inches in height, with a stroke width of not less than 0.5 inch.

• Contrast and Visibility

Address identification characters shall contrast with their background and be placed in a position that is visible from the street or road.

• Additional Locations

Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response.

• Private Road Access

If the building address cannot be viewed from the public way, a monument, pole, or other sign or means shall be used to identify the structure.

• Address Maintenance

Address identification shall be maintained to ensure it remains legible and visible.

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BATHROOM ACCESSIBILITY



Minimum bathroom requirement

All new single-family houses, duplexes, triplexes, condominiums, and townhouses must provide at least one bathroom.



Bathroom door width

If a bathroom is located at habitable grade level, the bathroom door must have a clear opening of at least 29 inches (737 mm).



Toilet room width

If only a toilet room is provided at grade level, the clear opening must be at least 29 inches (737 mm).

These requirements ensure accessibility and privacy for bathrooms in new residential construction.

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Termite Protection

R318.1 TERMITE PROTECTION REQUIRED WITH REGISTERED TERMITICIDE

- INTENDED FOR NEW CONSTRUCTION BY FLORIDA DEPARTMENT OF AGRICULTURE
- FLORIDA STATUTES CHAPTER 487

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Termite Protection

R318.1 TERMITE PROTECTION

- COMPLIANCE FROM LICENSED PEST CONTROL COMPANY TO VERIFY COMPLIANCE WITH RULES AND LAWS ESTABLISHED BY DEPARTMENT OF AGRICULTURE
- NO PROVISIONS FOR OWNER-BUILDER

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Termite Protection

R318.1 TERMITE PROTECTION INITIAL TREATMENT

- DONE AFTER EXCAVATION, BACKFILLING, AND COMPACTING COMPLETE
- ENTIRE AREA UNDER BUILDING AND WITHIN 1'

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Termite Protection

R318.1 TERMITE PROTECTION INITIAL TREATMENT

- RETREAT IF AREA IS DISTURBED OR RAINED ON
- PROTECT FROM RAIN WITH 6 MIL VAPOR RETARDER
- CONCRETE OVERPOUR MUST BE REMOVED

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Termite Protection

R318.1 TERMITE PROTECTION BAIT SYSTEMS

- R318.1.1-R318.1.6 DO NOT APPLY
- SUBMIT SIGNED CONTRACT TO ASSURE INSTALLATION, MAINTENANCE, AND MONITORING
- PROVIDE NOTICE THAT BAITING SYSTEM IS TO BE USED PRIOR TO POURING SLAB

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Termite Protection

R318.1 TERMITE WOOD TREATMENT SYSTEM

- R318.1.1-R318.1.6 DO NOT APPLY
- COMPLETED PRIOR TO FINAL BUILDING APPROVAL

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Termite Protection

R318.2 PENETRATION SLEEVES

- NOT OF CELLULOSE CONTAINING MATERIALS
- MAX THICKNESS OF 0.01"
- SEALED WITHIN THE SLAB TO ELIMINATE ANNULAR SPACE
- TREATMENT NOT BE APPLIED INSIDE SLEEVE

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Termite Protection

R318.3 CLEANING

- CELLS AND CAVITIES IN MASONRY UNITS SHALL BE FREE OF WOOD OR OTHER CELLULOSE MATERIAL
- SOIL MAY BE USED TO FILL VOIDS IN MASONRY IF PLACED PRIOR TO TREATMENT.

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Termite Protection

R318.4 CONCRETE BEARING LEDGE

- COLD JOINTS NOT PERMITTED

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Termite Protection

R318.5 PROTECTION AGAINST DECAY AND TERMITES

- CONDENSATE LINES, IRRIGATION HEADS, AND DOWNSPOUTS SHALL DISCHARGE FROM BUILDING AT LEAST ONE FOOT FROM STRUCTURE.
- GUTTERS ARE REQUIRED IF OVERHANG <6"

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Termite Protection

R318.6 AREA UNDER BUILDING AND WITHIN 1' SHALL BE CLEAN

- NO VEGETATION OR STUMPS
- NO DEAD ROOTS
- NO TRASH, CARDBOARD, OR FOREIGN MATERIAL
- MUST BE COMPACTED

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Termite Protection

R318.6 AREA UNDER BUILDING AND WITHIN 1' SHALL BE CLEAN

- FORMS AND OTHER WOOD SHALL BE REMOVED

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Termite Protection

R318.7 INSPECTION FOR TERMITES

- CLEARANCE BETWEEN GRADE AND WALL COVERINGS MUST BE AT LEAST 6 INCHES (4 INCHES FOR PATIO).
- PAINT, CEMENTITIOUS FINISH, MASONRY VENEERS DO NOT APPLY

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Termite Protection

R318.8 FOAM PLASTIC PROTECTION IN VERY HEAVY AREAS
AS IDENTIFIED BY R301.2(6)

- FOAM PLASTICS CAN NOT BE INSTALLED BELOW GRADE OR WITHIN 6 INCHES OF GRADE ON COMBUSTIBLE OR NOT TREATED
- ACCEPTABLE ON INTERIOR OF BASEMENT WALLS

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AIRPORT NOISE

• Airport Noise Study Guidelines

The Aviation Safety and Noise Abatement Act of 1979 14 CFR Part 150 (US Department of Transportation) including revisions through January 2005 are adopted as a guideline for establishing airport noise control.

• Minimum dBA Reduction

The new structure or addition to an existing structure must achieve an average minimum dBA reduction equal to or greater than the reduction required by the local government's ordinance.

• Noise Attenuation Requirements

When required by a local government by local ordinance, the applicant must provide either: 1) A testing certificate from an accredited noise testing lab, 2) An engineering judgment signed and sealed by a licensed engineer in the State of Florida, or 3) Plans using the standards contained in the 'Guidelines for Sound Insulation of Residences Exposed to Aircraft Operations' prepared for the Department of the Navy.

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