

GEORGIA DEPARTMENT OF AGRICULTURE

COMMISSIONER TYLER J HARPER

Compliance Assistance Module
Crawlspace Ventilation





Objectives

- Achieve an understanding of the ventilation requirements.
- Achieve an understanding of how to comply with these new ventilation requirements.





What does the regulation require?

The rule requires the inspection and correction of under-floor ventilation according to the International Residential Building Code for One and Two Family Dwellings, the latest addition as adopted by the Georgia Department of Community Affairs.

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When is an inspection required by rule?

Inspection of the under-floor space ventilation is required for the following 3 types of WDO services:

- Official Georgia Wood Infestation Inspection Reports (WIIR) under #9 as a condition conducive.
- WDO Fungi Treatment Standard Rule 620-6-.04(4).
- Wood Boring Beetle Treatment Standard Rule 620-6-.04(3).





What is required if ventilation does not meet the current code?

- If issuing a WIIR, the condition conducive should be corrected or noted under the conditions conducive to infestation section as “insufficient ventilation.”
- For WDO Fungi and Wood Boring Beetle Treatment Standards with the infestation in the crawl space and the ventilation does not meet the current code then the ventilation is required to be corrected to meet the current code.





What are the ventilation options that comply with the ventilation standard?

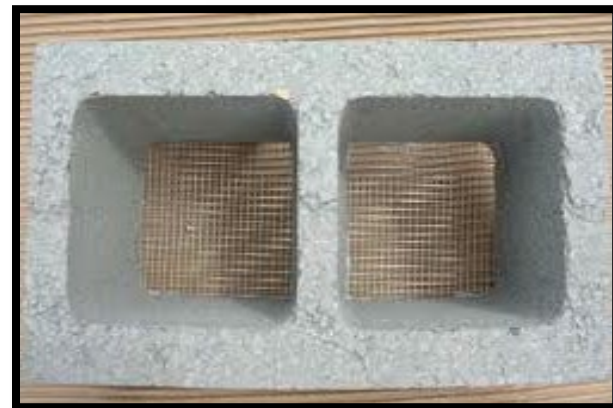
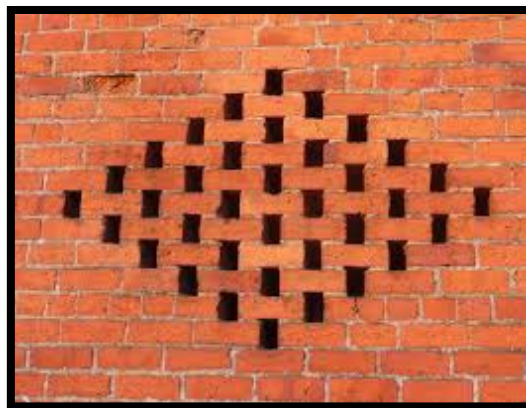
- (R408.1) Ventilation openings must be a minimum of 1 square foot for each 150 square feet of under-floor space area.
- One such ventilation opening must be placed within 3 feet of each corner of the building.





Ventilation Openings

- A ventilation opening is not necessarily a one square foot opening.
- Many different size openings apply.



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Ventilation Calculation

- This is the total net clear area of opening required that must be distributed among all the openings.
- An 8 inch by 16 inch opening provides 128 square inches of ventilation opening.
- Ten 8 inch by 16 inch openings will provide 1,280 square inches which is greater than the 1,252 square inches that is required.
- One such ventilation opening must be installed within three feet of each corner of the structure.





What are the ventilation options that comply with the ventilation standard?

- (R408.2) Ventilation openings can be reduced to 1 square foot for each 1500 square feet of under-floor space if 90% of the ground surface is covered with a Class 1 vapor retarder material.
- Ventilation openings must be installed as to provide cross ventilation.





What is an approved vapor barrier?

The vapor barrier must be a Class 1 vapor retarder.

- Permeance level of 0.1 perm or less and is considered impermeable.
- The perm rating is a measure of the diffusion of water vapor through a material.
- The industry standard is a polyethylene material of 4-6 mil.
- 1 mil = 0.001 inch (1/1000 inch).





What are the ventilation options that comply with the ventilation standard?

- (R408.2 Exception) Exception to the requirement for a vent to be placed within three feet of each corner.
- Ventilation openings can be reduced to 1 square foot for each 1500 square feet of under-floor space with required ventilation opening placed to provide cross ventilation and the ground surface 90% covered with a Class 1 vapor retarder material.





Ventilation Opening Covering

Section R408.2 – Ventilation opening covering

- Ventilation openings shall be covered for their height and width.
- Several options are provided and they all must have openings that have no dimensions exceeding 1/4 of an inch.
- For some covering materials the net free area can be up to 50 percent less than the gross area of the ventilation opening.





Unvented Crawlspace

Section R408.3 – Unvented Crawl Space

- Exposed earth is covered with a continuous Class 1 vapor retarder.
- Joints of the vapor retarder shall overlap by 6 inches and shall be sealed or taped.
- The edges of the vapor retarder shall extend at least 6 inches up the stem wall and shall be attached and sealed to the stem wall or insulation; and one of the following:





Unvented Crawlspace

Section R408.3 – Unvented Crawl Space

- Continuously operated mechanical exhaust ventilation at a rate equal to 1 cubic foot per minute for each 50 square feet of crawlspace floor area, including an air pathway to the common area (such as a duct or transfer grille), and the perimeter walls insulated in accordance with Section N1103.2.1 of the building code.





Unvented Crawlspace

Section R408.3 – Unvented Crawlspace

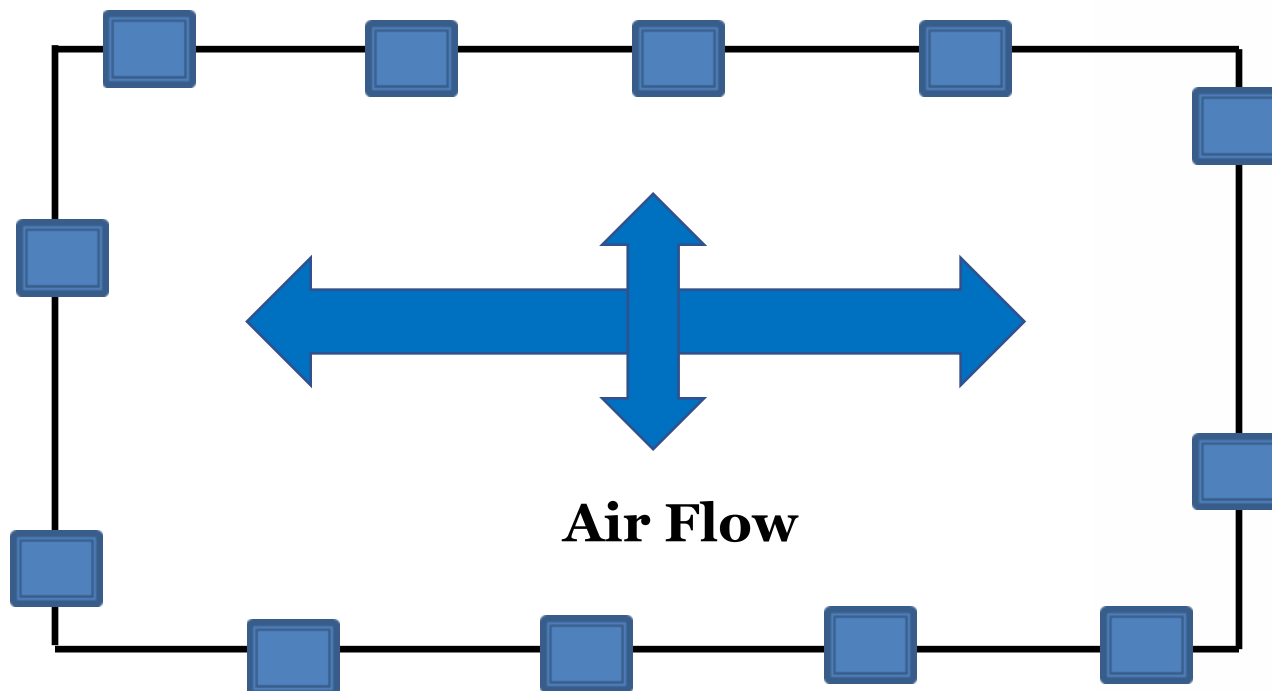
- Conditioned air supply sized to deliver at a rate equal to 1 cubic foot per minute for each 50 square feet of under floor area, including a return air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section N1102.2 of the building code.





Vent Placement

Crawlspace without vapor retarder



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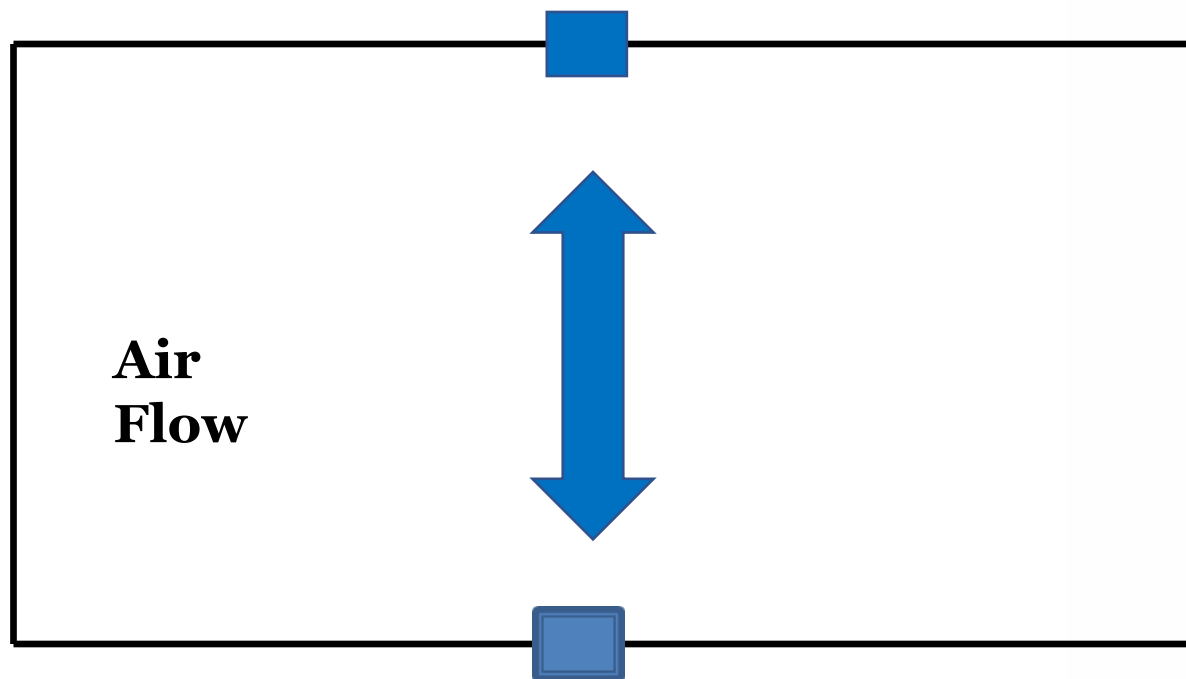
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Cross Ventilation

Crawlspace with 90% vapor retarder



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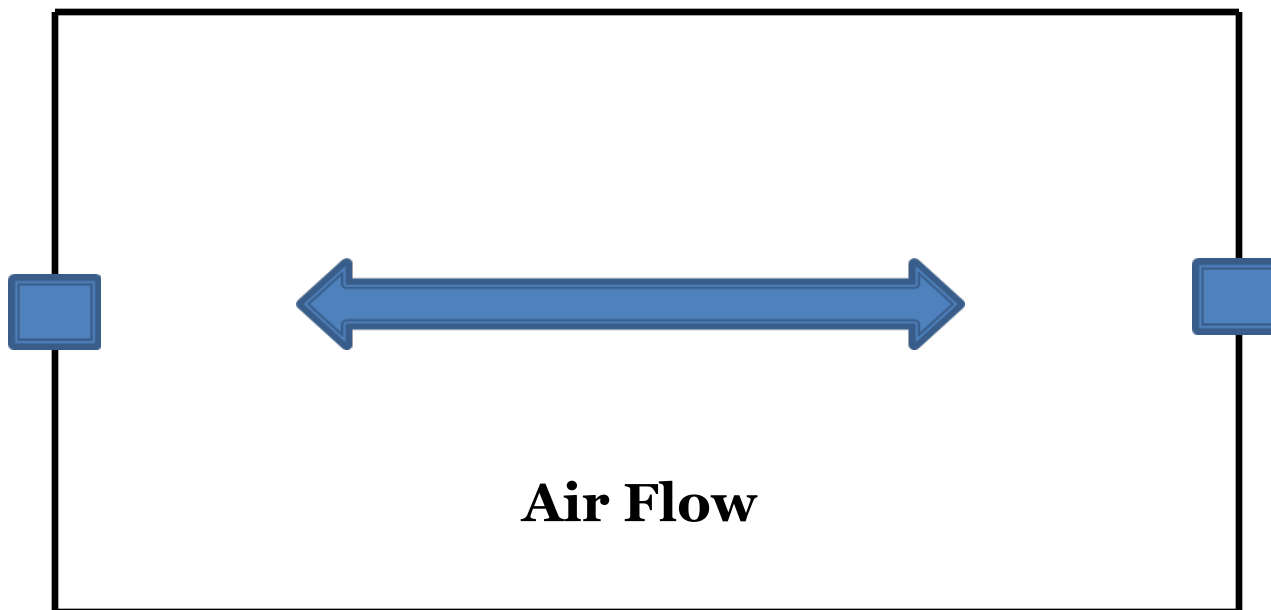
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Cross Ventilation

Crawlspace with 90% vapor retarder



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Other Questions

- Are well vents permitted?
 - Yes. If the grade is taken into the ventilation consideration and do not allow water to drain into the crawlspace.
- Can an Official Waiver Form be issued for inadequate ventilation?
 - No. The Official Waiver Form is for subterranean treatment standards only.





Online Resources

GDA website: agr.georgia.gov



Pest Control



[Structural Pest Control](#)

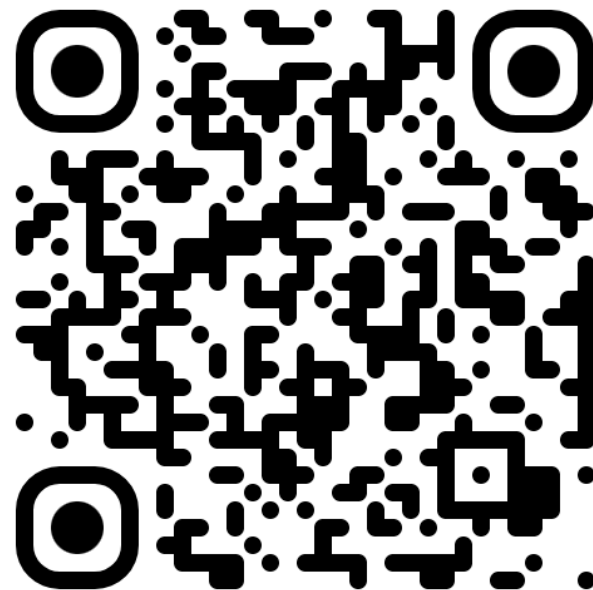


[Compliance Resources](#)



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GDA is here for you!

We're standing by to take your questions.



STRUCTURAL PEST

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Give us a call

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