

**WASHINGTON STATE BUILDING CODE COUNCIL**  
**APPLICATION FOR REVIEW OF A PROPOSED STATEWIDE AMENDMENT**  
**TO THE WASHINGTON STATE BUILDING CODE**  
 2012 Code Adoption Cycle

Log # \_\_\_\_\_  
 (office use only)

**PLEASE FOLLOW INSTRUCTIONS ON PAGE FIVE**

**1. State Building Code to be Amended:**


	International Building Code		State Energy Code
	International Residential Code	X	International Mechanical Code
	ICC ANSI A117.1 Accessibility Code		International Fuel Gas Code
	International Fire Code		NFPA 54 National Fuel Gas Code
	Uniform Plumbing Code		NFPA 58 Liquefied Petroleum Gas Code

**Section:** 2009 IMC Table 403.3 (WA Amend)      **Page:** 31

**2. Applicant Name (Specific local government, organization or individual):**

Eric Vander Mey, P.E., LEED AP

**3. Signed:**

      Principal      March 1, 2012  
 Proponent      Title      Date

**4. Designated Contact Person:**

Eric Vander Mey, P.E., LEED AP      Principal  
 Name      Title

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**5. Proposed Code Amendment.** Use ‘legislative format’ including both old and new language. **See instructions on page five for specific details.** Please use a separate sheet for each separate proposal.

**Code:** 2009 IMC

**Section:** Table 403.3

**Page:** 31

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Amend section to read as follows:

See next page for start of Table 403.3

**TABLE 403.3  
MINIMUM VENTILATION AIR**

<b>Occupancy Classification</b>	<b>People Outdoor Airflow Rate in Breathing Zone cfm/person</b>	<b>Area Outdoor Airflow Rate in Breathing Zone R<sub>a</sub> Cfm/ft<sup>2a</sup></b>	<b>Default Occupant Density #/1000 ft<sup>2</sup></b>	<b>Exhaust Airflow Rate cfm/ft<sup>2</sup></b>
<b>Correctional facilities</b>				
Cells				
w/o plumbing fixtures	5	0.12	25	--
with plumbing fixtures	5	0.12	25	1.0
	--	--	--	--
Dining halls (see food and beverage service)				
Guard stations	5	0.06	15	--
Day room	5	0.06	30	--
Booking/waiting	7.5	0.06	50	--
<b>Dry cleaners, laundries</b>				
Coin-operated dry cleaner	15	--	20	--
Coin-operated laundries	7.5	0.06	20	--
Commercial dry cleaner	30	--	30	--
Commercial laundry	25	--	10	--
Storage, pick up	7.5	0.12	30	--
<b>Education</b>				
Art classrooms	10	0.18	20	0.7
Auditoriums	5	0.06	150	--
Classrooms (ages 5-8)	10	0.12	25	--
Classrooms (ages 9 plus)	10	0.12	35	--
Computer lab	10	0.12	25	--
Corridors	--	--	--	0.25
Day care (through age 4)	10	0.18	25	--
Lecture classroom	7.5	0.06	65	--
Lecture hall (fixed seats)	7.5	0.06	150	--
Locker/dressing rooms	--	--	--	-0.25
Media center	10	0.12	25	--
Multi-use assembly	7.5	0.06	100	--
Music/theater/dance	10	0.06	35	--
Science laboratories	10	0.18	25	1.0
Smoking lounges <sup>b</sup>	60	--	70	--
Sports locker rooms	--	--	--	0.5
Wood/metal shops	10	0.18	20	0.5
<b>Food and beverage service</b>				
Bars, cocktail lounges	7.5	0.18	100	--
Cafeteria, fast food	7.5	0.18	100	--
Dining rooms	7.5	0.18	70	--
Kitchens (cooking) <sup>b</sup>	--	--	--	0.7
<b>Hospitals, nursing and convalescent homes</b>				
Autopsy rooms <sup>b</sup>	--	--	--	0.5
Medical procedure rooms	15	--	20	--
Operating rooms	30	--	20	--
Patient rooms	25	--	10	--
Physical therapy	15	--	20	--
Recovery and ICU	15	--	20	--
<b>Hotels, motels, resorts and dormitories</b>				
Multipurpose assembly	5	0.06	120	--
Bathrooms/toilet--private	--	--	--	25/50 <sup>f</sup>
Bedroom/living room	5	0.06	10	--
Conference/meeting	5	0.06	50	--
Dormitory sleeping areas	5	0.06	20	--
Gambling casinos	7.5	0.18	120	--
Kitchens	--	--	--	25/100 <sup>f</sup>
Lobbies	7.5	0.06	30	--

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(Insert Facing Page 31)

**TABLE 403.3—continued  
MINIMUM VENTILATION RATES**

<b>Offices</b>				
Conference rooms	5	0.06	50	--
<u>Kitchenettes</u>	--	--	--	<u>0.30</u>
Office spaces	5	0.06	5	--
Reception areas	5	0.06	30	--
Telephone/data entry	5	0.06	60	--
Main entry lobbies	5	0.06	10	--
<b>Private dwellings, single and multiple</b>				
Garages, common for multiple units <sup>b</sup>	--	--	--	0.75
Garages, separate for each dwelling	--	--	--	100 cfm per car
Kitchens <sup>b</sup>	--	--	--	25/100 <sup>f</sup>
Living areas <sup>c</sup>	See Tables 403.8.5.1 and 403.8.5.2	--	Based on the number of bedrooms: first bedroom: 2; each additional bedroom: 1	--
Toilet rooms bathrooms and laundry areas <sup>i</sup>	--	--	--	25/50 <sup>f</sup>
<b>Public spaces</b>				
Corridors	--	0.06	--	--
Elevator car	--	--	--	1.0
Shower room (per shower head)	--	--	--	50/20 <sup>f</sup>
Smoking lounges <sup>b</sup>	60	--	70	--
	--	--	--	50/70 <sup>e</sup>
Toilet rooms--public				
Places of religious worship	5	0.06	120	--
Courtrooms	5	0.06	70	--
Legislative chambers	5	0.06	50	--
Libraries	5	0.12	10	--
Museums (children's)	7.5	0.12	40	--
Museums/galleries	7.5	0.06	40	--
<b>Retail stores, sales floors and showroom floors</b>				
Sales (except as below)	7.5	0.12	15	--
Dressing rooms	--	--	--	0.25
Mall common areas	7.5	0.06	40	--
Shipping and receiving	--	0.12	--	--
Smoking lounges <sup>b</sup>	60	--	70	--
Storage rooms	--	0.12	--	--
Warehouses (see storage)	--	--	--	--
<b>Specialty shops</b>				
Automotive motor-fuel-dispensing stations <sup>b</sup>	--	--	--	1.5
Barber	7.5	0.06	25	0.5
Beauty and nail salons <sup>b,h</sup>	20	0.12	25	0.6
Embalming room <sup>b</sup>	--	--	--	2.0
Pet shops (animal areas) <sup>b</sup>	7.5	0.18	10	0.9
Supermarkets	7.5	0.06	8	--
<b>Sports and amusement</b>				
Disco/dance floors	20	0.06	100	--
Bowling alleys (seating areas)	10	0.12	40	--
Game arcades	7.5	0.18	20	--
Ice arenas, without combustion engines	--	0.30	--	0.5
Gym, stadium arena (play area)	--	0.30	--	--
Spectator areas	7.5	0.06	150	--
Swimming pools (pool and deck area)	--	0.48	--	--
Health club/aerobics room	20	0.06	40	--
Health club/weight room	20	0.06	10	--
<u>Arenas</u>	--	--	--	<u>0.50</u>

(Continued)

**TABLE 403.3—continued  
MINIMUM VENTILATION RATES**

<b>Storage</b>				
Repair garages, enclosed parking garage <sup>b,d</sup>	--	--	--	0.75
<a href="#">Janitor closets, trash rooms, recycling rooms</a>	--	--	--	<a href="#">1.0</a>
<a href="#">Storage rooms, chemical</a>	--	--	--	<a href="#">1.5</a>
Warehouses	--	0.06	--	--
<b>Theaters</b>				
Auditoriums (see education)	--	--	--	--
Lobbies	5	0.06	150	--
Stages, studios	10	0.06	70	--
Ticket booths	5	0.06	60	--
<b>Transportation</b>				
Platforms	7.5	0.06	100	--
Transportation waiting	7.5	0.06	100	--
<b>Workrooms</b>				
Bank vaults/safe deposit	5	0.06	5	--
Darkrooms	--	--	--	1.0
Copy, printing rooms	5	0.06	4	0.5
Meat processing <sup>c</sup>	15	--	10	--
Pharmacy (prep area)	5	0.18	10	--
Photo studios	5	0.12	10	--
Computer (without printing)	5	0.06	4	--

For SI: 1 cubic foot per minute = 0.0004719m<sup>3</sup>/s,  
 1 ton = 908 kg,  
 1 cubic foot/minutes/square foot = 0.00508 m<sup>3</sup>/(s•m<sup>2</sup>), °C = [(°F)-32]/1.8,  
 1 square foot = 0.0929 m<sup>2</sup>.

- a. Based upon net occupiable floor area.
- b. Mechanical exhaust required and the recirculation of air from such spaces is prohibited (see Section 403.2.1, Item 3).
- c. Spaces unheated or maintained below 50°F are not covered by these requirements unless the occupancy is continuous.
- d. Ventilation systems in enclosed parking garages shall comply with Section 404.
- e. Rates are per water closet or urinal. The higher rate shall be provided where periods of heavy use are expected to occur, such as toilets in theaters, schools and sports facilities. The lower rate shall be permitted where periods of heavy use are not expected.
- f. Rates are per room unless otherwise indicated. The higher rate shall be provided where the exhaust system is designed to operate intermittently. The lower rate shall be permitted where the exhaust system is designed to operate continuously during normal hours of use.
- g. Reserved.
- h. For nail salons, the required exhaust rate shall include ventilation tables or other systems that capture the contaminants and odors at their source and are capable of exhausting a minimum of 50 cfm per station.
- i. A laundry area within a kitchen or bathroom is not required to have source specific exhaust. [For the laundry area to qualify as being within the kitchen the laundry room door must open directly into the kitchen and not into an adjacent corridor.](#) Where there are doors that separate the laundry area from the kitchen or bathroom, the door shall be louvered.

Are additional pages attached?

Yes

No

Please note number of additional pages:

**Supporting Data for Statewide Amendment Proposals.** This information is required for all statewide amendment proposals. **Attach supporting documentation, as necessary; incomplete proposals will not be accepted.**

The SBCC requires supporting data on any amendment proposal to show:

1. That it meets basic criteria – See Part I to specify how this proposal meets the criteria for code amendment.
2. The intended effect—See Part II to describe the purpose of the proposed amendment, including the benefits and the problems addressed.
3. The potential impacts or benefits to business—See Part III/Types of Construction, to explain how methods in construction businesses, industries and services would be affected.
4. The potential impact on enforcement procedures, See Part III/Types of Services Required, to provide some analysis of the impacts on code enforcement in local jurisdictions.
5. Economic costs and benefits – Use the Table in Part IV of this form to estimate the costs and benefits of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance.

**Part I ❖ Background information on amendment.**

Code References: 2009 IMC Table 403.3 Title: Ventilation Table  
Related codes: \_\_\_\_\_ (Does this amendment change other related codes?)  
Proponent: Eric Vander Mey Phone: 206-285-7114 Date: 3/1/2012

**NOTE:** State-wide and emergency state-wide amendments to the state building code must be based on one of the following criteria; please indicate the pertinent rationale for the proposed amendment by selecting from the list below:

- (1) The amendment is needed to address a critical life/safety need.
- (2) The amendment is needed to address a specific state policy or statute.
- (3) The amendment is needed for consistency with state or federal regulations.**
- (4) The amendment is needed to address a unique character of the state.
- (5) The amendment corrects errors and omissions.**

**Part II ❖ Amendment Benefit:**

PROBLEM(S) ADDRESSED (Describe the intended effect of the proposed code amendment):

Adds additional room types that are required to be exhausted per ASHRAE 62.1-2010.  
Clarify that location in relation to the kitchen for laundry rooms to exclude source specific exhaust in dwelling units.

PRIMARY REASON FOR AMENDMENT: (Describe how the amendment meets one of the criteria listed above)

This amendment corrects errors and omissions. Clarifies existing code language to improve enforcement.

TYPE OF BENEFITS PROJECTED:

All types.

**Part III ❖ Amendment Impacts or Benefits:**

TYPES OF CONSTRUCTION:  New Construction  Alteration/Tenant Improvement/Repair  
 Residential-Single Family  Residential-Multi Family  Commercial  Industrial

List businesses/industries affected by amendment:

Manufacturers:	N/A
Specific Construction Contractors & Trades:	N/A
Construction Supply Industry:	N/A
Specialty Trades:	N/A
Types of Buildings:	All types covered by Table 403.3
Fire Protection Industry:	N/A

TYPES OF SERVICES REQUIRED:

**Reporting.** Brief Description:

No impact.

**Record Keeping.** Brief Description:

No impact.

**Other.** Brief Description:

**Indirect Cost to Industry.** Indicate whether there are multiple sources to obtain the equipment, material or service required by this proposal. If not, provide a justification of the benefit versus small business impact.

**Part IV ❖ Amendment Costs and Benefits**

Building Type	Construction <sup>1</sup>			Enforcement <sup>2</sup>			Operations & Maintenance <sup>3</sup>		
	Costs	% impact <sup>4</sup>	Benefits <sup>5</sup>	Costs	% impact	Benefits	Costs	% impact	Benefits
Residential									
Single family									
Multi-family	None	None	None	Lower	Minimal	None	None	None	None
Commercial/Retail	None	None	None	Lower	Minimal	None	None	None	None
Industrial									
Institutional									

<sup>1</sup> \$ / square foot of floor area or other cost. Attach data. **Construction** costs are costs prior to occupancy, and include both design and direct construction costs that impact the total cost of the construction to the owner/consumer.

<sup>2</sup> Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and mediated litigation required for enforcement.

<sup>3</sup> Cost to building owner/tenants over the life of the project.

<sup>4</sup> Cost differential over a specific size project or range of projects as determined by the proponent. Provide sufficient cost and benefit detail to clarify the impact to the Council. All data should be created and referenced to third party reputable sources for verification.

<sup>5</sup> Note sectors with measurable benefit from Part II, including benefits to a) the user, b) the public, c) the industry, and/or d) the economy; use e) for all of the above.