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:

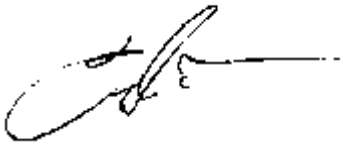
	International Building Code		State Energy Code
	International Residential Code		International Mechanical Code
	ICC ANSI A117.1 Accessibility Code		International Fuel Gas Code
	International Fire Code		NFPA 54 National Fuel Gas Code
X	Uniform Plumbing Code		NFPA 58 Liquefied Petroleum Gas Code

Section: UPC Table 11-2 **Page:** 162

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

David Price, CPD

3. Signed:



	Senior Mechanical Designer	March 1, 2012
Proponent	**Title**	**Date**

4. Designated Contact Person:

David Price, CPD	Senior Mechanical Designer
Name	**Title**

Address: 1725 Westlake Ave N, Suite 300
Seattle, WA 98109

Office Phone: 206-788-4578 **Cell:** 253-266-7971 **Fax:** 206-285-7111

e-mail address: davidp@rushingco.com

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: UPC **Section:** Table 11-2 **Page:** 162

Amend section to read as follows:

TABLE 11-2
Sizing of Horizontal Rainwater Piping

Size of Pipe, Inches	Flow at 1/8 in./ft. Slope, gpm	Maximum Allowable Horizontal Projected Roof Areas Square Feet at Various Rainfall Rates					
		1 in./hr	2 in./hr	3 in./hr	4 in./hr	5 in./hr	6 in./hr
2	14	1,347	673	449	336	270	224
3	34	3,288	1,644	1,096	822	657	548
4	78	7,520	3,760	2,506	1,880	1,504	1,253
5	139	13,360	6,680	4,453	3,340	2,672	2,227
6	222	21,400	10,700	7,133	5,350	4,280	3,566
8	478	46,000	23,000	15,330	11,500	9,200	7,670
10	860	82,800	41,400	27,600	20,700	16,580	13,800
12	1,384	133,200	66,600	44,400	33,300	26,650	22,200
15	2,473	238,000	119,000	79,333	59,500	47,600	39,650

Size of Pipe, Inches	Flow at 1/4 in./ft. Slope, gpm	Maximum Allowable Horizontal Projected Roof Areas Square Feet at Various Rainfall Rates					
		1 in./hr	2 in./hr	3 in./hr	4 in./hr	5 in./hr	6 in./hr
2	19	1,828	914	609	457	365	304
3	48	4,640	2,320	1,546	1,160	928	773
4	110	10,600	5,300	3,533	2,650	2,120	1,766
5	196	18,880	9,440	6,293	4,720	3,776	3,146
6	314	30,200	15,100	10,066	7,550	6,040	5,033
8	677	65,200	32,600	21,733	16,300	13,040	10,866
10	1,214	116,800	58,400	38,950	29,200	23,350	19,450
12	1,953	188,000	94,000	62,600	47,000	37,600	31,350
15	3,491	336,000	168,000	112,000	84,000	67,250	56,000

Size of Pipe, Inches	Flow at 1/2 in./ft. Slope, gpm	Maximum Allowable Horizontal Projected Roof Areas Square Feet at Various Rainfall Rates					
		1 in./hr	2 in./hr	3 in./hr	4 in./hr	5 in./hr	6 in./hr
2	28	2,695	1,347	898	673	539	449
3	68	6,576	3,288	2,192	1,644	1,310	1,096
4	156	15,040	7,520	5,010	3,760	3,010	2,500
5	278	26,720	13,360	8,900	6,680	5,320	4,450
6	445	42,800	21,400	14,267	10,700	8,580	7,140
8	956	92,000	46,000	30,650	23,000	18,400	15,320
10	1,721	165,600	82,800	55,200	41,400	33,150	27,600
12	2,768	266,400	133,200	88,800	66,600	53,200	44,400
15	4,946	476,000	238,000	158,700	119,000	95,200	79,300

- End of Proposed Amendment -

Note: Flow rates for 2” pipe based on Mannings formula with cast iron pipe sizes.

Are additional pages attached? No

Please note number of additional pages:

Log # _____
(office use only)

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: N/A Title: N/A
Related codes: Table 11-2 (Metric) (Does this amendment change other related codes?)
Proponent: David Price Phone: 206-788-4578 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):

Table 11-2 in the current form does not provide sizing information for using 2 inch horizontal rain water conductors.

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

Small decks and penthouse roof areas are often far smaller than the allowable projected roof areas listed in Table 11-2 for 3 inch pipe leading to unnecessarily oversized conductors.

TYPE OF BENEFITS PROJECTED:

Designers and engineers will have a code basis for using 2 inch piping for small roof drainage areas.

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:
Specific Construction Contractors & Trades: Plumbing Contractors, Plumbers, Plumbing Engineers & Designers
Construction Supply Industry:
Specialty Trades:
Types of Buildings:
Fire Protection Industry:

TYPES OF SERVICES REQUIRED:

☐ **Reporting.** Brief Description:

☐ **Record Keeping.** Brief Description:

☐ **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

	Construction[1]			Enforcement[2]			Operations & Maintenance[3]		
Building Type	Costs	% impact[4]	Benefits[5]	Costs	% impact	Benefits	Costs	% impact	Benefits
Residential									
Single family									
Multi-family									
Commercial/Retail									
Industrial									
Institutional									

[1] $ / 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.

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

[3] Cost to building owner/tenants over the life of the project.

[4] 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.

[5] 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.