

NON-TESTED Masonry Heater Acceptance Worksheet

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Version 4/20/2009

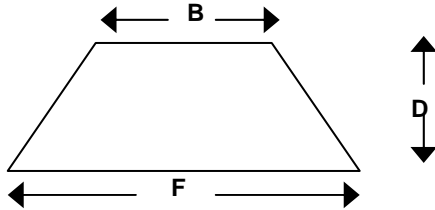
NON-TESTED Masonry Heater Acceptance Worksheet

Test appliance Builder or Manufacturer: _____

Tested Model, Model Line, or Design: _____

Candidate Non-tested Model, Model Line, or Design Name: _____

XI.1 Hearth Dimensions



X1.2 Firebox Comparisons		Tested Model Model Name	Non-Tested Model Model Name		Acceptance Criteria	Determination (NA/Acceptable /Out of Limits)
1	Back (inches B)	xx.x	xx.x			
2	Depth (inches D)	xx.x	xx.x			
3	Front (inches F)	xx.x	xx.x			
4	Height (inches H)	xx.x	xx.x			
5	Average Hearth Length (inches)	0.0	0.0			
6	Hearth Area (square feet)	0.00	0.00			
7	Hearth Area Proportionality (% of Tested Test appliance)		XX%	→	Greater Than 64 % and Less Than 121 %	
8	Ratio of Firebox Volume Proportionality (#17 below) to Hearth Area Proportionality (#7 above) (% of Firebox Volume Proportionality)		XX%	→	Greater Than 80 % and Less Than 120 %	
9	Front/Back Ratio (See Note 2)	0.00	0.00			
10	Front/Back Ratio Proportionality (% of Tested Test appliance)		XX%			
11	Front/Depth Ratio (See Note 2)	0.00	0.00			
12	Front/Depth Ratio Proportionality (% of Tested Test appliance)		XX%			
13	Front/Height Ratio (See Note 2)	0.00	0.00			
14	Front/Height Ratio Proportionality (% of Tested Test appliance)		XX%			
15	Standard Deviation of Firebox Dimensional Ratios (% of Mean)		XX%	→	Less Than 10 %	
16	Firebox Volume (cubic feet)	0.00	0.00			
17	Firebox Volume Proportionality (% of Tested Test appliance)		XX%	→	Greater Than 51 % and Less Than 133 %	

X1.3 Hearth Grate Comparisons

1	Back (inches B)	xx.x	xx.x			
2	Depth (inches D)	xx.x	xx.x			
3	Front (inches F)	xx.x	xx.x			
4	Hearth Area (square Feet)	0.00	0.00			
5	Grate Area Proportionality (% of Tested Test appliance)		XX%	→	Greater Than 64 % and Less Than 121 %	
6	Ratio of Grate Area to Hearth Area	0.00	0.00			
7	Ratio of Grate Area To Hearth Area Proportionality (% of Tested Test appliance)		XX%	→	Greater Than 80 % and Less Than 110 %	
8	Height of Grate Above Hearth (inches)	0.00	0.00			
9	Proportionality of Grate Height Above Hearth (% of Tested Test appliance)		XX%	→	Greater Than 80 % and Less Than 110 %	

X1.4 Horizontal and/or Downward Flue-Gas Pathway (See Note 3)		Tested Model Model Name	Non-tested Model Model Name		Acceptance Criteria	Determination (NA/Acceptable /Out of Limits)
1	Distance of Downward Flue-Gas Pathway (inches)	0.00	0.00			
2	Downward Distance Proportionality (% of Tested Test appliance)		XX %	→	Greater Than 80 % and Less Than 110 %	
3	Ratio of Firebox Volume Proportionality to Downward Flue-Gas Pathway Proportionality (% of Downward Flue-Gas Pathway Proportionality)		XX %	→	Greater Than 80 % and Less Than 110 %	
4	Distance of Horizontal Flue-Gas Pathway (inches)	0.00	0.00			
5	Horizontal Distance Proportionality (% of Tested Test appliance)		XX %	→	Greater Than 80 % and Less Than 110 %	
6	Ratio of Firebox Volume Proportionality to Horizontal Flue-Gas Pathway Proportionality (% of Horizontal Flue-Gas Pathway Proportionality)		XX %	→	Greater Than 80 % and Less Than 110 %	

X1.5 Chimney/Flue and Chimney/Flue Connector Comparisons

1	Chimney/Flue Connector Location (see note 4)			→	Same	
2	Chimney/Flue Diameter (inches)	0	0			
3	Chimney/Flue Cross-Sectional Area (square inches)	0.0	0.0			
4	Downward Distance Proportionality (% of Tested Test appliance)		XX %	→	Greater Than 51 % and Less Than 133 %	
5	Ratio of Firebox Volume Proportionality to Chimney/Flue Cross-Sectional Area Proportionality (% of Chimney/Flue Cross-Section Area Proportionality)		XX %	→	Greater Than 80 % and Less Than 110 %	
6	Ratio of Grate Area Proportionality to Chimney/Flue Cross-Sectional Area Proportionality (% of Chimney/Flue Cross-Sectional Area Proportionality)		XX %	→	Greater Than 80 % and Less Than 110 %	

X1.6 Firebox Construction Materials

		→	Same	
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X1.7 Pass/Fail

Note 1: This spreadsheet establishes the acceptance or non-acceptance of non-tested appliances based on whether the tested appliances has an acceptable margin of low emissions and an acceptable set of dimensional proportionalities between the tested and non-tested appliances. The criteria used in this spreadsheet define the "substantially the same core construction" and the "substantially similar to the tested model in internal assembly design, combustion function" terms cited by Washington State WAC 51-.

Note 2: Proportionality (%) = Measured Linear Dimension of Non-Tested appliance x 100 / Measured Linear Dimension of Tested appliance
 where: D = Linear Depth of firebox F = Front Linear Dimension
 H = Linear Height of firebox B = Back Linear Dimension

Note 3: Horizontal or downward or both flue-gas pathway is defined as the net horizontal or downward or both internal duct length, measured from the top of the uppermost firebox fuel loading door to the exit of the test appliance as traveled by any effluent on a single pathway through duct channel(s) within the test appliance (or average of net internal duct lengths for multiple pathways of different lengths, if applicable). Net internal duct length is measured from the center of the internal side or top surface of a duct, horizontally or vertically to the center of the opposite side or the bottom surface of the same duct, and summed for multiple ducts or directions on a single pathway, if applicable. For duct channel(s) traversing horizontal angles of less than 90° from vertical, only the net actual horizontal distance traveled is included in the total duct length.

Note 4. Use descriptive notation: that is, TopCenter, TopFront, or TopBack. Other, more appropriate flue exit location descriptors may be used. However, make sure that when the position descriptors for the tested and non-tested models are the same, the spelling and case are matched exactly.