




## IWA Tiers of Performance Report

<b>Cookstove</b>	<b>Manufacturer</b>	Institutional Stove Solutions
	<b>Model</b>	60L stove
<b>Testing Center</b>	Aprovecho Research Center, Cottage Grove, OR, USA	
<b>Protocol</b>	WBT 4.2.2	
<b>Fuel Used</b>	Wood (Douglas Fir)	
<b>Pot Used</b>	60L Aluminum stock pot	
<b>Test Dates</b>	March 6-12, 2013	

These results were obtained in accordance with the IWA and the Global Alliance for Clean Cookstoves' reporting requirements.<sup>1</sup> This data and additional supporting data are shared publically through the Stove Performance Inventory.

<b>Signature</b>	
<b>Name</b>	Sam Bentson

		<b>Metric</b>	<b>Value</b>	<b>Unit</b>	<b>Sub-Tier</b>
<b>Efficiency/Fuel Use</b>					
<b>Tier</b>	<b>4</b>	High power Thermal Efficiency	48.4	%	4
		Low power Specific Consumption	0.0101	MJ/min/l	4
<b>Emissions</b>					
<b>Tier</b>	<b>3</b>	High power CO	0.794	g/MJ <sub>d</sub>	4
		Low power CO	0.0154	g/min/l	4
		High power PM 2.5	83.1	mg/MJ <sub>d</sub>	3
		Low power PM 2.5	0.550	mg/min/l	4
<b>Indoor emissions</b>					
<b>Tier</b>	<b>4*</b>	High power Indoor emissions CO	N/A	g/min	4
		Low power Indoor emissions CO	N/A	g/min	4
		High power Indoor emissions PM 2.5	N/A	Mg/min	4
		Low power Indoor emissions PM 2.5	N/A	Mg/min	4
<b>Safety</b>					
<b>Tier</b>	<b>3</b>	Points from 10 weighted safety parameters	84.5	points	

\* Indoor emissions were not measured, as this product is a chimney stove and vents all emissions to the outdoors. This category has been rated as tier 4 since there were no visible indoor emissions.

**Tier 0 → Improving Importance → Tier 4**

<sup>1</sup> Interim Stove Performance Reporting Requirements: <http://community.cleancookstoves.org/files/318>



### Individual Scores for Safety Assessment Criteria

Assessment Criteria	Score (1 – 4)	Multiplier
Sharp Edges and Points	4	1.5
Cookstove Tipping	4	3.0
Containment of Fuel	3	2.5
Obstructions Near Cooking Surface	3	2.0
Surface Temperature	1	2.0
Heat Transmission to Surroundings	4	2.5
Temperature of Operational Construction	4	2.0
Chimney Shielding	2	2.5
Flames Surrounding the Cookpot	4	3.0
Flames/Fuel Exiting Fuel Chamber, Canister, or Pipes	4	4.0



### IWA Tiers of Performance Report

<b>Cookstove</b>	<b>Manufacturer</b>	Institutional Stove Solutions
	<b>Model</b>	100L stove
<b>Testing Center</b>	Aprovecho Research Center, Cottage Grove, OR, USA	
<b>Protocol</b>	WBT 4.2.2	
<b>Fuel Used</b>	Wood (Douglas Fir)	
<b>Pot Used</b>	100L Aluminum stock pot	
<b>Test Dates</b>	March 28 – April 10, 2013	

These results were obtained in accordance with the IWA and the Global Alliance for Clean Cookstoves' reporting requirements.<sup>1</sup> This data and additional supporting data are shared publicly through the Stove Performance Inventory.

<b>Signature</b>	
<b>Name</b>	Sam Bentson

		<b>Metric</b>	<b>Value</b>	<b>Unit</b>	<b>Sub-Tier</b>
<b>Efficiency/Fuel Use</b>					
<b>Tier</b>	<b>4</b>	High power Thermal Efficiency	46.7	%	4
		Low power Specific Consumption	0.00883	MJ/min/l	4
<b>Emissions</b>					
<b>Tier</b>	<b>3</b>	High power CO	1.25	g/MJ <sub>d</sub>	4
		Low power CO	0.00771	g/min/l	4
		High power PM 2.5	102	mg/MJ <sub>d</sub>	3
		Low power PM 2.5	0.475	mg/min/l	4
<b>Indoor emissions</b>					
<b>Tier</b>	<b>4*</b>	High power Indoor emissions CO	N/A	g/min	4
		Low power Indoor emissions CO	N/A	g/min	4
		High power Indoor emissions PM 2.5	N/A	Mg/min	4
		Low power Indoor emissions PM 2.5	N/A	Mg/min	4
<b>Safety</b>					
<b>Tier</b>	<b>3</b>	Points from 10 weighted safety parameters	84.5	points	

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**Tier 0 → Improving Importance → Tier 4**

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### Individual Scores for Safety Assessment Criteria

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Sharp Edges and Points	4	1.5
Cookstove Tipping	4	3.0
Containment of Fuel	3	2.5
Obstructions Near Cooking Surface	3	2.0
Surface Temperature	1	2.0
Heat Transmission to Surroundings	4	2.5
Temperature of Operational Construction	4	2.0
Chimney Shielding	2	2.5
Flames Surrounding the Cookpot	4	3.0
Flames/Fuel Exiting Fuel Chamber, Canister, or Pipes	4	4.0