



# DECLARATION OF PERFORMANCE

**Manufacturer:** Arada Ltd

**Range Designation:** Hardy 4 and Hardy 5 Stoves

**Intended Use:** Domestic heating appliance

**Independent Performance and Safety tested by:** Kiwa Gastec, Notified Body No: 0558

**Constancy of Performance System:** ISO9001

Model	HARDY4M-S4	HARDY5M-S4
Approximate Output Range: (kW)	1 - 5.5	1 - 6.5
Harmonised EN European Standard (hEN):	BS EN 13240:2001 + Amd 2:2004	BS EN 13240:2001 + Amd 2:2004
Additional Characteristics Test Standard:		
Additional Particulate Emission Test Standard:		
Test Report reference:	60160-1	60160-6
<b>Performance Characteristics on Wood Fuel</b>		
Total Efficiency: (%)	84.1	80.9
Declared nominal output: (kW)	4.2	4.5
Tested nominal Output: (kW)	4.2	5
Flue gas mass flow: (g/s)	2.5	3.8
Mean CO emission (@13% O <sub>2</sub> ): (%)	0.58	0.58
Mean OGC emission (@13% O <sub>2</sub> ): (Nmg/m <sup>3</sup> )		
Mean NO <sub>x</sub> emission (@13% O <sub>2</sub> ): (Nmg/m <sup>3</sup> )		
DIN+ particulates (@13% O <sub>2</sub> ): (Nmg/m <sup>3</sup> )		
PD6434 Particulate Emissions High output: (gh-1)		
PD6434 Particulate Emissions Low output: (gh-1)		
Mean Flue Temperature: (Deg C)	199	279
Underhearth Temperature: (Deg C)	38.4	74.8
Approximate Max Log Length: (mm)	200	200
<b>Performance Characteristics on Ancit Briquetted Smokeless Fuel</b>		
Total Efficiency: (%):		
Declared nominal output: (kW)		
Tested nominal output: (kW)		
Flue gas mass flow: (g/s)		
Mean CO emission (@13% O <sub>2</sub> ): (%)		
Mean OGC emission (@13% O <sub>2</sub> ): (Nmg/m <sup>3</sup> )		
Mean NO <sub>x</sub> emission (@13% O <sub>2</sub> ): (Nmg/m <sup>3</sup> )		
DIN+ particulates (@13% O <sub>2</sub> ): (Nmg/m <sup>3</sup> )		
Mean Flue Temperature: (Deg C)		
Underhearth Temperature: (Deg C)		
<b>Safety Distances From Combustibles (standard flue connection)</b>		
Side Wall: (mm)	500	500
Rear Wall: (mm)	650	675
<b>Safety Distances From Combustibles (twin wall flue connection)</b>		
Side Wall: (mm)		
Rear Wall: (mm)		

Signed

Chris Linwood  
Technical Director