



# DECLARATION OF PERFORMANCE

**Manufacturer:** Arada Ltd

**Range Designation:** Solution S4 freestanding Stoves

**Intended Use:** Domestic heating appliance

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

**Constancy of Performance System:** ISO9001

Model	SOL4-S4	SOL5 Compact-S4	SOL5-S4	SOL5 Widescreen-S4	SOL7-S4	SOL9-S4	SOL11-S4
Approximate Output Range: (kW)	1 - 5	1 - 6	1.5 - 6.5	1.5 - 7	2 - 9	2.5 - 11	2.5 - 13
Harmonised EN European Standard (hEN):	BS EN 13240:2001 + Amd 2:2004	BS EN 13240:2001 + Amd 2:2004	BS EN 13240:2001 + Amd 2:2004	BS EN 13240:2001 + Amd 2:2004	BS EN 13240:2001 + Amd 2:2004	BS EN 13240:2001 + Amd 2:2004	BS EN 13240:2001 + Amd 2:2004
Additional Characteristics Test Standard:	DIN+	DIN+	DIN+	DIN+	DIN+		
Additional Particulate Emission Test Standard:	PD6434	PD6434	PD6434	PD6434	PD6434		
Test Report reference:	KG61276 / PROJ-0221	KG61276 / PROJ-0211	KG61210 / PROJ-0206	KG61276 / PROJ-0207	KG61276 / PROJ-0208		
<b>Performance Characteristics on Wood Fuel</b>							
Total Efficiency: (%)	83.1	81	80.6	82.5	77.9		
Declared nominal output: (kW)	4.5	5	5	5	7		
Tested nominal Output: (kW)	4.6	4.8	4.9	5	7		
Flue gas mass flow: (g/s)	3.7	3.9	4	4	6.2		
Mean CO emission (@13% O <sub>2</sub> ): (%)	0.1	0.12	0.09	0.12	0.12		
Mean OGC emission (@13% O <sub>2</sub> ): (Nmg/m <sup>3</sup> )	91	79	67	113	107		
Mean NO <sub>x</sub> emission (@13% O <sub>2</sub> ): (Nmg/m <sup>3</sup> )	113	60	104	84	109		
DIN+ particulates (@13% O <sub>2</sub> ): (Nmg/m <sup>3</sup> )	28	11	22	13	18		
PD6434 Particulate Emissions High output: (gh-1)	3.3	2.6	3	2.3	1.8		
PD6434 Particulate Emissions Low output: (gh-1)	1.6	1.6	1.2	1.1	1.2		
Mean Flue Temperature: (Deg C)	232	259	265	240	291		
Underhearth Temperature: (Deg C)	92	98	53	94	53		
Approximate Max Log Length: (mm)	200	200	300	330	330		
<b>Performance Characteristics on Ancit Briquetted Smokeless Fuel</b>							
Total Efficiency: (%):	75.5	79.9	79.7	79.4	81.5		
Declared nominal output: (kW)	4.5	5	5	5	7		
Tested nominal output: (kW)	4.4	4.8	4.9	5	7.1		
Flue gas mass flow: (g/s)	3.8	3.5	3.8	3.3	4.3		
Mean CO emission (@13% O <sub>2</sub> ): (%)	0.11	0.08	0.11	0.05	0.06		
Mean OGC emission (@13% O <sub>2</sub> ): (Nmg/m <sup>3</sup> )	45	56	44	30	42		
Mean NO <sub>x</sub> emission (@13% O <sub>2</sub> ): (Nmg/m <sup>3</sup> )	150	101	132	121	120		
DIN+ particulates (@13% O <sub>2</sub> ): (Nmg/m <sup>3</sup> )	16	18	33	25	24		
Mean Flue Temperature: (Deg C)	300	285	275	291	326		
Underhearth Temperature: (Deg C)	92	98	53	94	53		
<b>Safety Distances from Combustibles (standard flue connection)</b>							
Side Wall: (mm)	650	700	550	550	650		
Rear Wall: (mm)	650	700	750	900	650		
<b>Safety Distances from Combustibles (twin wall flue connection)</b>							
Side Wall: (mm)	650	700	550	500	650		
Rear Wall: (mm)	225	250	350	350	350		

Signed

Chris Linwood  
 Technical Director  
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