

APPENDIX B. STOVE SAFETY COMPARISONS

Test 1: Sharp Edges and Points

Test 2: Cookstove Tipping

Test 3: Containment of Fuel

Test 4: Obstructions Near Cooking Surface

Test 5: Surface Temperature

Test 6: Heat Transmission to Surroundings

Test 7: Temperature of Operational Construction

Test 8: Chimney Shielding

Test 9: Flames Surrounding Cookpot

Test 10: Flames/Fuel Exiting Fuel Chamber, Canister, or Pipes

Stove	1	2	3	4	5	6	7	8	9	10	Total ¹
Onil	3	4	4	4	4	4	4	3	4	4	38
Wood Flame	3	4	4	4	2	4	4	4	4	4	37
Banladesh wood	4	4	2	4	3	4	4	4	4	4	37
Eco-Lenca	4	3	3	4	3	4	4	4	3	4	36
Justa	4	4	4	3	4	4	4	1	4	4	36
Generic propane	3	3	4	4	3	4	4	4	3	4	36
Clean Cook	4	4	4	4	2	4	3	4	3	4	36
Kerosene	3	3	4	4	2	4	4	4	3	4	35
Mud/Sawdust traditional	4	3	3	4	2	1	4	4	4	4	33
Eco-Fogon	4	3	4	2	2	4	4	2	4	4	33
Patsari	3	4	4	2	2	4	4	1	4	4	32
World Food Program	2	2	4	4	1	3	4	4	4	4	32
Ghana wood	3	4	2	4	1	3	4	4	3	4	32
Parabolic solar cooker	3	4	4	4	2	1	2	4	4	4	32
Prolena EcoStove	3	3	4	3	2	4	4	1	4	4	32
Uganda 2-Pot	3	2	4	3	2	4	4	1	4	4	31
Mali Charcoal	3	3	3	3	1	2	4	4	4	4	31
Wood Gas	3	2	4	4	1	3	2	4	4	4	31
Gyapa charcoal	3	1	2	4	2	3	4	4	4	4	31
Eco-Horno	4	3	4	2	1	4	1	2	4	4	29
VITA	1	2	3	3	1	2	4	4	4	4	28
T-LUD gassifier	3	1	4	4	1	4	2	1	4	4	28
3-stone fire	4	1	1	2	2	1	1	4	2	1	19
Multipliers:²	1.5	3	2.5	2	2	2.5	2	2.5	3	4	

Overall Rating	Stove	Total ³	Change in Rank ⁴
Best	Onil	96	*
	Wood Flame	94.5	*
	Banladesh wood	93	-1
Good	Clean Cook	91	*
	Justa	90.5	+1
	Generic propane	90.5	+1
	Eco-Lenca	89.5	+3
	Kerosene	88.5	*
	Eco-Fogon	84	*
Fair	Mud/Sawdust traditional	83	+1
	Patsari	83	+1
	Parabolic solar cooker	83	-1
	World Food Program	82.5	+2
	Ghana wood	82	+3
	Prolena EcoStove	82	+3
	Mali Charcoal	80	*
	Wood Gas	80	*
	Uganda 2-Pot	79	+2
	Gyapa charcoal	78	+3
	Eco-Horno	76	*
	Poor	VITA	74
T-LUD gassifier		72	+1
3-stone fire		44	*

Notes:

1. This total is out of 40 points (max of 4 for all ten tests).
2. Multipliers given based off discussion in Section 5.4.
3. This total is out of 100 points.
4. Change in rank shows how the weighted rating system (out of 100) affects stove placement in relation to the original rating system (out of 40). Astricks are used to represent stoves that had no change (e.g. +1 = New Rank – Old Rank).