



RUNNING COST CALCULATIONS FOR TRITON ELIX EXTRACT FAN

All the fan powers used are based on the BRE SAP Appendix Q test results as this is the only truly independent uniform test available.

The BRE test is conducted at boost speeds of 8 l/s for bathrooms and 13 l/s for kitchens. This is fine for comparison purposes but does not provide a true representative for calculating actual running costs. In a typical scenario the fan will only be on boost for an hour or two at most each day and not for twenty four hours.

Therefore we take the efficiency figure, known as Specific Fan Power (SFP), from BRE which is shown in W/l/s. This is used to calculate how many watts the fan will actually use on trickle speed, which is considerably lower than when on boost.

Below is a typical example.

KITCHEN

The Triton Elix has a BRE test result of 0.17 W/l/s at 13 l/s – kitchen boost; so the total amount of watts used by a Triton Elix would be:

	Time per day (hrs)	SFP (W/l/s)	Extract Rate (l/s)	Total Watts
BOOST	2hrs	0.17 W/l/s	13l/s	4.42W
TRICKLE	22hrs	0.17 W/l/s	9l/s (approx. trickle rate)	33.06W
Kitchen TOTAL	24hrs			38.08W per day

BATHROOM

In the bathroom the BRE test result of 0.17 W/l/s at 8 l/s – bathroom boost; so the total amount of watts used by a Triton Elix would be:

	Time per day (hrs)	SFP (W/l/s)	Extract Rate (l/s)	Total Watts
BOOST	2hrs	0.14 W/l/s	8l/s	2.24W
TRICKLE	22hrs	0.14 W/l/s	5l/s (approx. trickle rate)	15.40W
Bathroom TOTAL	24hrs			17.64 per day

So to ventilate a typical dwelling to current system 3 building regulation requirements: uses 49.28 watts per day (29.12w + 20.16w)

Kitchen W	Bathroom W	Daily Total W	Yearly Total kW	Electricity Costs	Annual Running Cost
38.08W	17.64W	55.72W	20.34kW	14.5p/kW/hr	£2.95/year (approx. £1.30 per fan)

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