

## RUNNING COST CALCULATIONS FOR TRITON ELEGANCE 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 <u>boost</u> 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 Elegance has a BRE test result of 0.13 W/l/s at 13 l/s – kitchen boost; so the total amount of watts used by a Triton Elegance would be:

	Time per day (hrs)	SFP (W/l/s)	Extract Rate (I/s)	Total Watts
BOOST	2hrs	0.13 W/I/s	13l/s	3.38W
TRICKLE	22hrs	0.13 W/I/s	9I/s (approx.	25.74W
			trickle rate)	
Kitchen TOTAL	24hrs			29.12W per day

## **BATHROOM**

In the bathroom the BRE test result of 0.16 W/l/s at 8 l/s – bathroom boost; so the total amount of watts used by a Triton Elegance would be:

	Time per day (hrs)	SFP (W/l/s)	Extract Rate (I/s)	Total Watts
BOOST	2hrs	0.16 W/I/s	8I/s	2.56W
TRICKLE	22hrs	0.16 W/I/s	5I/s (approx. trickle rate)	17.60W
Bathroom TOTAL	24hrs			20.16W 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	Bathroom	Daily Total	Yearly Total	Electricity	Annual
W	W	W	kW	Costs	Running Cost
29.12W	20.16W	49.28W	17.99kW	14.5p/kW/hr	£2.61/year
					(approx. £1.30 per fan)

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