

RAISE Restore1030™ Proof of Longevity

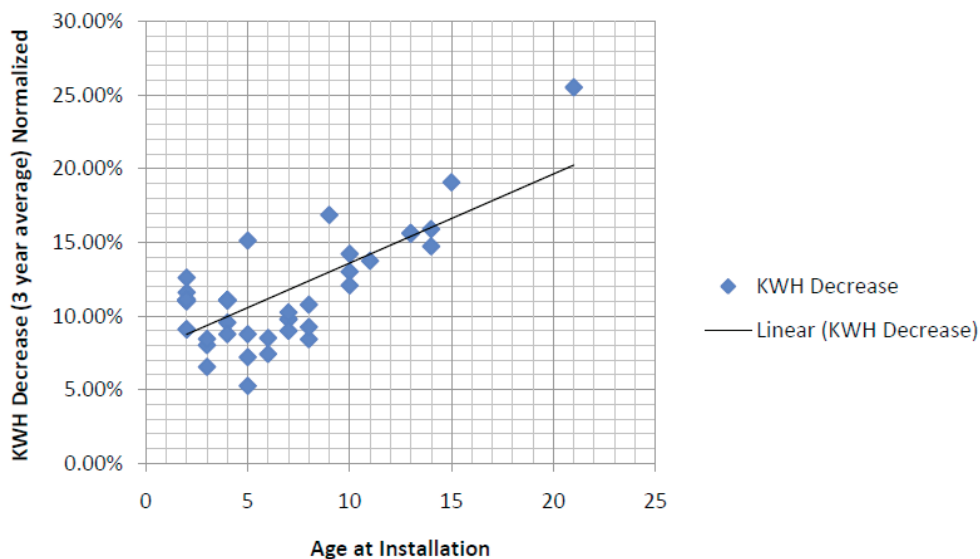
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We are frequently asked how we know **RESTORE1030™** will continue to perform over time. The only real way to make the determination is to gather information from prior installations. Our information came from utility bills from our clients for the year before the installation and three years after. In order to make a valid comparison we used only the months of May through October which is the primary air conditioning season. The data was compared as follows:

1. Each month of the base year was compared to the corresponding month in each of the following three years.
2. In order to compensate (normalized) for temperature changes the Cooling Degree Days (CDD) for each of the after installation months was corrected to the base year numbers.
3. The KWH usage data for the three years after installation was averaged to compare to the base year on a monthly basis.
4. Questions were asked to determine if the use patterns had changed over the study period and only constant patterns were used in the study.

The unit type and age at installation were recorded from installation data. The purpose was to determine if there was a correlation as to the age of the unit and the efficiency increase experienced.

The following graph shows the results of KWH decrease as it relates to unit age.



Two things become very evident when you look at the graph. First the trend line clearly shows the older the unit the better the results. This is due to several factors. First, the "oil fouling" is more severe in older units. Second, the older units have lower seer ratings and have the potential to show higher improvement. The second item of importance is the points have a wide spread of efficiency increase even in the same age group. This is due to different seer ratings and whether the unit was properly sized for the application. Also important to notice here is the KWH decrease shown is of the total utility bill and not just the portion attributable to Air Conditioning.

The following gives the information on each of the units in the study.

Manufacturer	Model #	Tonnage	% KWH 3 yr Decrease	Age at Installation	KWH Decrease
TRANE	XL 14	4	11.08%	4	11.08%
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TRANE	XL 14	4	11.08%	4	11.08%
TRANE	XL 19	5	11.08%	4	11.08%
TRANE	XL 19	5	11.08%	4	11.08%
RHEEM	RPPA049JAZ	4	11.00%	2	11.00%
RHEEM	RPPA049JAZ	4	11.00%	2	11.00%
JANITROL	CKJ048-LAB	4	15.12%	5	15.12%
LUX AIR	AC5036A2C1	3	16.86%	9	16.86%
YORK	WLG160400	4	8.76%	5	8.76%
TRANE	2TWR106011000AB	5	11.60%	2	11.60%
HEIL	NAC042AKA1	3 1/2	12.60%	2	12.60%
TRANE	TCD060C300BC	5	11.11%	2	11.11%
TRANE	TCC060F300BA	5	11.11%	2	11.11%
TRANE	TCD210C300EA	5	11.11%	2	11.11%
TRANE	TSC060A3E0A2F	5	11.11%	2	11.11%
RUUD	UAMA036JAZ	3	15.60%	13	15.60%
RUUD	UAMA036JAZ	3	15.60%	13	15.60%
CARLYLE	AIR COND 5H40-A219	40	9.78%	7	9.78%
CARLYLE	AIR COND #5H40A-219	40	9.78%	7	9.78%
GOODMAN	CKJ30-1AB	2 1/2	9.09%	2	9.09%
GOODMAN	CKJ30-1AB	2 1/2	9.09%	2	9.09%
LENNOX	12ACB60	5	8.50%	6	8.50%
TRANE	TWR042C100B0	13	15.64%	13	15.64%
HEIL	HAC448AKA1	4	7.20%	5	7.20%
TRANE	TWR042C100A0	3 1/2	19.08%	15	19.08%
TRANE	YCP060F1M0AA	5	8.99%	7	8.99%
TRANE	2TTR2048A1000AA	4	6.54%	3	6.54%
TRANE	TTP036C100AT	3	14.73%	14	14.73%
LENNOX	H526-048-2P	4	8.42%	8	8.42%
GOODMAN	A49-10	4	8.02%	3	8.02%
TRANE	TTP060100AA	5	14.22%	10	14.22%
CARRIER	38BRC060340	5	5.25%	5	5.25%
LENNOX	0525-411	5	13.74%	11	13.74%
TRANE	TWE030P13FAO	2 1/2	13.01%	10	13.01%
LENNOX	H526-036-CA	3	12.08%	10	12.08%
CARRIER	38CMC024310	2	15.90%	14	15.90%
RUUD	UAKA037JAZ	3	9.55%	4	9.55%
CARRIER	38CKC024340	2	8.44%	3	8.44%
CARRIER	38AKS024	10	8.76%	4	8.76%
LENNOX	H526030-1P	2 1/2	9.25%	8	9.25%
TRANE	TTJ030B100AO	2 1/2	10.24%	7	10.24%
TRANE	2TTBP048A1000AA	4	10.77%	8	10.77%
RHEEM	RAPA042JAZ	3 1/2	7.42%	6	7.42%
GOODMAN	TH036-1A	3	25.53%	21	25.53%

The study clearly shows that the decreased KWH for each of these units has given the customer a good ROI for a period of three years after RESTORE1030™ installation. Because of the polymer this should continue for the life of the unit.