



Use the following chart to determine the heating capacity of various VMB & HBC equipment when used with a Chiltrix air to water heat pump. Applies to heating only, the standard cooling data can be used as is with Chiltrix. The de-rate factor below is applied to the published 180F water temperature rating. For example on a HBC or CMB unit with a 180F rating of 68 kbtu, when used with 105F entering water and using the .3359 de-rate factor, it would be re-rated for a low temp hydronic heat pump such as Chiltrix as 22.8 kbtu.

EWT (F)	100	105	110	115	120
EAT (F)					
65	0.318	0.3635	0.409	0.4545	0.5
66	0.3088	0.3543	0.3998	0.4454	0.491
67	0.2996	0.3451	0.3906	0.4362	0.4818
68	0.2904	0.3359	0.3814	0.427	0.4726
69	0.2812	0.3267	0.3722	0.4178	0.4634
70	0.272	0.3175	0.363	0.4086	0.4542
71	0.263	0.3085	0.354	0.3996	0.4452
72	0.254	0.2995	0.345	0.3906	0.4362
73	0.245	0.2905	0.336	0.3816	0.4272
74	0.236	0.2815	0.327	0.3726	0.4182
75	0.227	0.2725	0.318	0.3636	0.4092

Notes:

- 1) To determine heating capacity at other than 180 deg. EWT (Entering Water Temperature) and 70 deg. EAT (Entering Air Temperature) multiply the selected heating capacity at 180 deg. times the appropriate correction factor from the above chart.
- 2) These correction factors may be used on all First Co. published 180 deg. heating capacities.
- 3) With all air to water heat pumps, including Chiltrix, the COP and outdoor unit capacity will be lower as "lift" increases. Lift is the difference between outdoor temperature and the system supply temperature (also the Firstco ET). Your customer will get better performance when using the lowest possible EWT. Chiltrix recommends sizing the air handler units per the Manual J report at 105F EWT to maximize system efficiency.