

# RECOMMENDED COLD STORAGE DATA

PROD	UCTS	STORAGE TEMP.	% RH	STORAGE PERIOD	
Apples		-1 to +1	85-90	2-7M	
Apricots	(10)(1)	-0.5 to + 1.6	78-85	1-2W	
Bananas		+11.7	85	2 W	
Beans, dried	ZZ.	+0.7	70	6 M	
Beef (Fresh)		+1.75	87	3 W	
Beef (Frozen)		-18 to -20	80-85	3-8M	
Butter		-10 to -1	75-80	6 M	
Cabbage		0 to +1	85-90	1-3M	
Carrots, bundles	Thur.	0	85-90	1 - 2·W	
Cauliflower	11,	0 to +2	85-90	2-3W	
Cucumbers		+2 to +7	75-85	2 W	
Cheese		-1 to +1.5	65 - 75	3-10 M	
Cherries	35 35	+0.5 to +1	80	1-3 W	
Chocolate		+4.5	75	6 M	
Dates		-4.5	75	12 M	
Eggs	8	-1 to -0.5	80-85	8 M	
Fish (Fresh)		-0.5 to +4	90-95	1-2 W	
Fish (Frozen)	"	-20 to -12	90-95	8-10M	
Grapes	2020	-1 to +3	85-90	1-4M	
Honey		+1.	75	6 M	

D - Ďays

W - Weeks

M - Months



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PRODUC	TS	STORAGE TEMP.	% RH	STORAGE PERIOD	
Ice Cream	ce Cream		85	2 - 12 W	
Lamb (Fresh)		0 to +1	80-90	5-10D	
Lamb (Frozen)	NA AV	-24 to -12	80-90	10 M	
Lemons	00	+5 to +10	80-90	2 M	
Lettuce		0 to +1	85-90	1-2 M	
Lobster	Lobster		80	1 M	
Margarine		+0.5	80	6 M	
Melons		+2 to +7	80-90	1-8 W	
Milk		0 to +2	80-85	1 W	
Mutton (Fresh)	Mutton (Fresh)		80-85	10 D 3-8 M	
Mutton (Frozen)	Mutton (Frozen)		80-85		
Oranges		0 to +1.2	85-90	8-10W	
Peas, Green		0	80-90	1-3 W	
Peaches	00	-0.5 to +1	80-85	2-4W	
Parsley		+1.5	80	1-2 W	
Potatoes		+3 to +6	85-90	6 M	
Poultry (Fresh)		0	80	1 W	
Poultry (Frozen)	$\square$	-30 to -10	80	3-12 M	
Tomatoes, Green	and the second	+10 to +20	85-90	3-4 W	
Vegetables		-24 to -18		6-12 M	

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PRODU	JCTS	STORAGE TEMP.	% RH	STORAG PERIOD	
Apples	(T)	-1 to +1	85-90	2-7M	
Apricots	000	-0.5 to + 1.6	78-85	1-2W	
Bananas		+11.7	85	2W 6M 3W 3-8M	
Beans, dried	ZZ.	+0.7	70		
Beef (Fresh)	<b>E</b>	+1.75	87		
Beef (Frozen)		-18 to -20	80 - 85		
Butter		-10 to -1	75-80	6M	
Cabbage	#	0 to +1	85-90	1-3M	
Carrots, bundles	>1111	0	85-90	1-2·W	
Cauliflower	7 🙀	0 to +2	85-90	2-3W	
Cucumbers		+2 to +7	75-85	2W 3-10M	
Cheese	DOO	-1 to +1.5	65-75		
Cherries	88	+0.5 to +1	80	1-3 W	
Chocolate	<b>S</b>	+4.5	75	6 M	
Dates		-4.5	75	12 M	
ggs	8	-1 to -0.5	80-85	8 M	
Fish (Fresh)		-0.5 to +4	90-95	1-2 W	
ish (Frozen)	"e	-20 to -12	90-95	8-10 M	
Grapes	No No	-1 to +3	85-90	1-4M	
loney	冒	+1.	75	6M	
D - Ďays	W	- Weeks		M - M	



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PRODUC	CTS	STORAGE TEMP.	% RH	STORAGE PERIOD	
Ice Cream	De la constant de la	-30 to -20	85	2 - 12 W	
Lamb (Fresh)	2	0to+1	80-90	5-10D	
Lamb (Frozen)	VERY	-24 to -12	80-90	10M	
Lemons	00	+5 to +10	80-90	2 M	
Lettuce		0 to +1	85-90	1-2 M	
Lobster	*	-7	80	1 M	
Margarine	<b>Q</b>	+0.5	80	6 M	
Melons .		+2 to +7	80-90	1-8W	
Milk	fg	0 to +2	80-85	1 W	
Mutton (Fresh)	colle.		80-85	10 D	
Mutton (Frozen)	<i>€</i>	-12 to -18	80-85	3-8 M	
Oranges	<b>3</b>	0 to +1.2	85-90	8-10W	
Peas, Green		0	80-90	1-3 W	
Peaches	Ć0	-0.5 to +1	80-85	2-4 W	
Parsiey .		+1.5	80	1-2 W	
Potatoes		+3 to +6	85-90	6M	
Poultry (Fresh)	<b>23</b>	0	80	1W	
Poultry (Frozen)	3	-30 to -10	80	3-12 M	
Tomatoes, Green	CCD	+10 to +20	85-90	3-4W	
Vegetables		-24 to -18	- 1	6-12 M	



## RECOMMENDED KW PER CROSSECTIONAL DUCT AREA

Di	uct	6	8	10 /	12	14	16	18	20	22	24	264	28	30	32	36	42	48
Height	Width	ľ					M	AXIM	UM K	N STA	ANDAF	RD DES	IGN					
4		2	3	4	5	5	6	7	8	9	10	10	11	12	13	15	17	19
6		3	5	6	7	8	10	11	12	13	15 .	16	17	18	19	22	26	30
8		5	6	. 8	10	11	13,	15	16	18	20	21	23	25	26	30	35	40
10		6	8	10	12	14	16	18	20	23	25	27	29	31	33	37	43	50
12		7	10.	12	15	17	20	22	25	27	30	32 .	35	37	40	45	52	60
14		8	11	14	17	20	23	26	29	32	35	37	40	43	46	52	61	70
16		10	13	16	20	23	26	30	33	36	40	43	46	50	53	60	70	80
18		11	15	18	-22	26	30	33	37	41	45 .	48	52	56	60	67	78	90
20		12	16	20	25	29	33	37	41	45	50	54	58	62	66	75	87	100
22	1 12	13	18	22	27	32	36	41	45	50	55	60	64	68	73	82	96	110

#### FORMULA FOR CALCULATING LINE CURRENTS

S.no	BTU/H	Kw	120V	230V	440V
. 1	/),10239	3	25	13.0	3.9
2	20478	6	50	26.0	7.9
. 3	30717	. 9 .	75	439.1	11.8
4 .	40956	12	100	52.1	15.7
5	51195	15	125	65.1	19.7
6.	' 61434	18	150	78.1	23.6
7 .	71673	21	174.9	91.1	27.5
8	81912	24	200	104.2	30.4
9	9151	27	225	117.2	35.4
10	102390	30 .	250	130.2	39.3
11	112629	33	275	. 143.2	43.2
12	122868	36	· 300 a	. :156.2	47.2
13	133107	39	325	169.3	51.1
14	143346	42	350	182.3	55.0
15	153585	45	375	195.3	59.0
16	163824	48	400	208.3	62.9
17	s 170650	50	416.6	217.0	65.5

## **CALCULATING KW REQUIREMENT:**

Once the volume of airflow (CFM — in cubic feet per minute and the required temperature rise (  $\Delta T$  degrees F) through the heater are known, the required Kw rating (Kw) of the heaters can be determined from the formula:-

$$KW = \frac{CMF \times \Delta T^0 F}{31.93}$$

$$KW = \frac{Liters / Second \times \Delta T^0 C}{837}$$

Where the desired heating capacity in BTU/Hr is known the Kw is determined from the

following formula:-

$$KW = \frac{BTU/Hr}{3412}$$

SINGLE PHASE (1 PHASE)

THREE PHASE (3.PHASE)

AMPERES = WATTS
LINE VOLTAGE

AMPERES = WATTS
LINE VOLTAGE x1.73