

## SPECIFICATION SHEET

- **NFJA/NCJA JUMBO ISLAND FF/IC/MED TEMP MERCHANDISERS •**
- **NTJA JUMBO ISLAND LOW & MED TEMP DUAL TEMP SPLIT COIL MERCHANDISERS •**
- **NFJEA/NCJEA JUMBO ISLAND FF/IC/MED TEMP END MERCHANDISERS •**

### Refrigeration Data:

MODEL	CASE LENGTH	CASE USAGE	CAPACITY (BTUH / FT)*		EVAPORATOR (°F)	UNIT SIZING (°F)	DISCHARGE AIR		AVG. REF. CHARGE (LBS/FT)
			PARALLEL	CONVENTIONAL			TEMPERATURE (°F)	VELOCITY (FPM)	
NFJA	8', 12'	FROZEN	544	568	-25**	-28	-15	230***	0.85
NCJA	8', 12'	ICE CREAM	636	652	-35**	-38	-25	230***	0.85
NFJA	8', 12'	MED TEMP	437	448	+15**	+13	+22	230***	0.85
NTJA	8', 12'	FROZ / MED TEMP	272 / 218	284 / 224	-25** / +15**	-28 / +13	-15 / +22	230***	0.43 / 0.43
NTJA	8', 12'	FROZ / ICE CRM	272 / 318	284 / 326	-25** / -35**	-28 / -38	-15 / -25	230***	0.43 / 0.43
NFJEA	77 1/2"	FROZEN	2,266****	2,364****	-25**	-28	-15	230***	0.35
NCJEA	77 1/2"	ICE CREAM	2,883****	2,957****	-35**	-38	-25	230***	0.35
NFJEA	77 1/2"	MED TEMP	2,229****	2,286****	+15**	+13	+22	230***	0.35

\* For sizing all refrigeration equipment other than TYLER, use conventional BTUH values.

\*\* Evaporator temperature is defined as the saturated suction temperature leaving the case.

\*\*\* Air velocity is measured 60 minutes after defrost at the Discharge Air Ducts.

\*\*\*\* BTUH rating is for entire end case.

FOR SPECIFIC COMPRESSOR SIZING AND/OR LINE SIZING INFORMATION, REFER TO THE "GOLD" AND/OR "BUFF" SECTIONS IN THE TYLER SPECIFICATION GUIDE.

### Electrical Data:

Fans (120 Volt) and Optional T-8 Lighting with Electronic Ballasts (120 Volt)

MODEL	CASE LENGTH	FANS / CASE	TOTAL FOR STANDARD FANS		TOTAL FOR ECM FANS		T-8 LIGHTING FOR OPT. SUPERSTRUCTURE	
			AMPS	WATTS	AMPS	WATTS	AMPS	WATTS
NFJA/NCJA/NTJA	8'	4	1.36	120.8	0.88	44.0	2.00	240.0
NFJA/NCJA/NTJA	12'	6	2.04	181.2	1.32	66.0	3.00	360.0
NFJEA/NCJEA	77 1/2"	2	0.68	60.4	0.44	22.0	0.30	36.0

Heaters (120 and 208 Volt)

MODEL	CASE LENGTH	ANTI-SWEAT HEATERS (120 V)						DEFROST HEATERS (208 V)				DRAIN PAN HEATER (120V) HG	
		DISCHARGE AIR		RETURN AIR		OPT. SUPERSTRUCTURE		COILS		DRAIN PAN (208V) Elec			
		AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS	AMPS	WATTS
NFJA	8'	1.92	230.4	0.60	72.0	3.80	456.0	13.80	2,860	2.24	466	5.00	600
NCJA/NTJA	8'	1.92	230.4	0.60	72.0	3.80	456.0	21.64	4,500	2.88	600	5.00	600
NFJA	12'	2.54	304.8	0.90	108.0	5.20	324.0	20.60	4,290	3.36	700	7.50	900
NCJA/NTJA	12'	2.54	304.8	0.90	108.0	5.20	324.0	34.62	7,200	4.33	900	7.50	900
NFJEA/NCJEA	77 1/2"	0.40	48.0	0.60	72.0	1.30	156.0	8.60	1,788	N/A	N/A	N/A	N/A

**CASE CIRCUITS:** In addition to a 208V defrost circuit, there is the 120V case fan circuit plus the 120V case anti-sweat circuit. Cases with Gas Defrost have a separate 120V circuit for the drain pan heater. Shelf or canopy lights require a separate 120V circuit which can be switched at the back room for convenience in controlling the lights.

208 VOLT DEFROST (AMPS)												
FEET	8	12	16	20	24	28	32	36	40	44	48	52
FF/MED 1 PH	16.0 TG-30	24.0 TG-30	32.0 TG-40	40.0 TG-50	(Separate circuit recommended due to high amp draw) N/A							
FF/MED 3 PH	12.1 TG-3-30	20.7 TG-3-30	18.6 TG-3-30	18.2 TG-3-30	31.1 TG-3-40	32.8 TG-3-40	37.0 TG-3-50	15.6/15.6 TG-3-30-30	15.6/24.2 TG-3-30-30	26.8/26.8 TG-3-40-40	31.0/31.0 TG-3-40-40	32.0/32.0 TG-3-40-40
IC 1 PH	24.5 TG-30	38.9 TG-50	(Separate circuit recommended due to high amp draw) N/A									
IC 3 PH	21.0 TG-3-30	34.0 TG-3-40	32.0 TG-3-40	38.0 TG-3-50	34/34 TG-3-40-40	28/28 TG-3-40-40	34/34 TG-3-40-40	34/34 TG-3-40-40	38/38 TG-3-50-50	34/34/34 TG-3-40-40-40	34/34/34 TG-3-40-40-40	38/38/38 TG-3-50-50-50

**CASE BTUH REQUIREMENTS** are calculated to produce approximately the indicated entering-air temperature with absolute maximum operating ambient limits of **75°F & 55RH**.

The information contained herein is based on technical data and tests that we believe are reliable, and is intended for use by persons having technical skill at their own discretion and risk. Since conditions of use are outside of Tyler's control, we cannot assume any liability for results obtained or damages incurred through the applications of the data presented. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

CASE-TO-CASE SUCTION LINE SUB-FEED BRANCH LINE SIZING												
FEET	8	12	16	20	24	28	32	36	40	44	48	52
R404A FF	7/8"	7/8"	7/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"
R404A IC	7/8"	1 1/8"	1 1/8"	1 1/8"	1 31/8"	1 3/8"	1 3/8"	1 3/8"	1 5/8"	1 5/8"	1 5/8"	1 5/8"
R22 MED	7/8"	7/8"	7/8"	1 1/8"	1 1/8"	1 1/8"	1 1/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"	1 3/8"

#### Defrost Data:

DEFROST TYPE	DEFROSTS PER DAY	DURATION TIME (MIN)	TERMINATION TEMP. (°F)	EPR SETTINGS **		DEFROST WATER (LB / FT / DAY)
				R22 (PSIG)	R404A (PSIG)	
ELECTRIC / FF	1	60	50	7	14	0.68
ELECTRIC / IC	1	36	50	3	8	0.58
ELECTRIC / MED	1	36	50	37	50	0.45
HOT GAS / FF	2-3	20-25	55*	7	14	0.68
HOT GAS / IC	1	25-30	55*	3	8	0.58
HOT GAS / MED	2-3	16-20	55*	37	50	0.45

\* If an Electronic Sensor is used for termination, it should be set at 70°F termination temperature.

\*\* Set EPR to give this pressure at the case.

#### NFJA / NCJA / NTJA APPLICATIONS:

The NFJA, NCJA and NTJA cases can be used in a wide variety of applications as described below:

**NFJA/NCJA:** These models have front and rear coils piped together and both wells are run off one compressor system. Always pipe the compressor system that will supply the coldest application usage.

1. Frozen food on both sides.
2. Ice cream on both sides. (NCJA only)
3. Medium temp on both sides. No dual temp control is needed, but you must specify the proper expansion valve and size the compressor system accordingly.
4. Frozen food on one side and ice cream on the other side. (NCJA only)
5. Frozen food on one side and medium temp on the other side.
6. Frozen food on one side and dual temp on the other side. **NOTE:** Dual temp refers to frozen food or medium temp operation by use of a dual temp control. Dual temp also requires an expansion valve sized for the coldest dual temp operation.
7. Dual temp on both sides. **NOTE:** This requires either one or two dual temp controls. Use one dual temp control when both wells are controlled together. Use two separate dual temp controls when you want to control the front and rear wells separately on one compressor.

**NTJA:** These models have the front and rear coils piped separately. This case is designed to run off separate compressor systems and operate in dual temp applications. In addition, this version has an insulated center partition to aid in maintaining the temperature differences between the two sides. Both sides must defrost at the same time.

#### TYPICAL USAGES:

1. Frozen food on one side and ice cream on the other side.
2. Frozen food on one side and medium temp on the other side.
3. Frozen food on one side and dual temp on the other side. **NOTE:** Dual temp refers to frozen food or medium temp operation by use of a dual temp control. Dual temp also requires an expansion valve sized for the coldest dual temp operation.
4. Dual temp on both sides. **NOTE:** This requires two dual temp controls to control both the front and rear wells on their respective compressor systems.

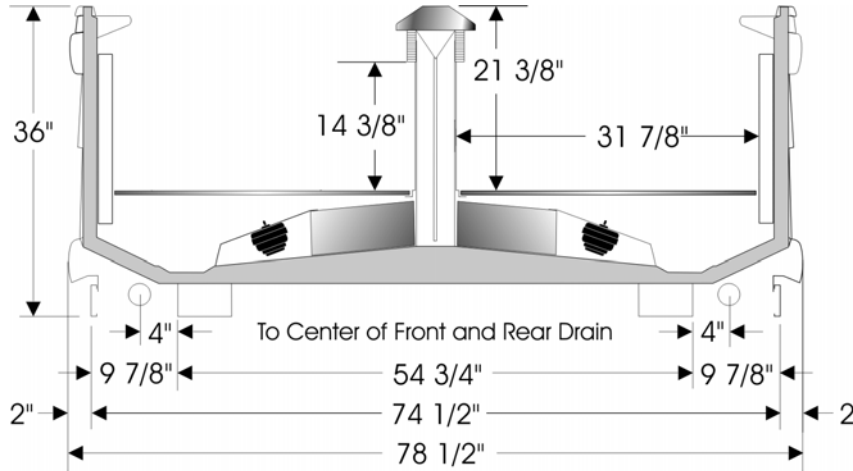
#### NON-TYPICAL USAGES:

5. Frozen food on both sides.
6. Ice cream on both sides.
7. Medium temp on both sides. No dual temp control is needed, but you must specify the proper expansion valve and size each compressor system accordingly.

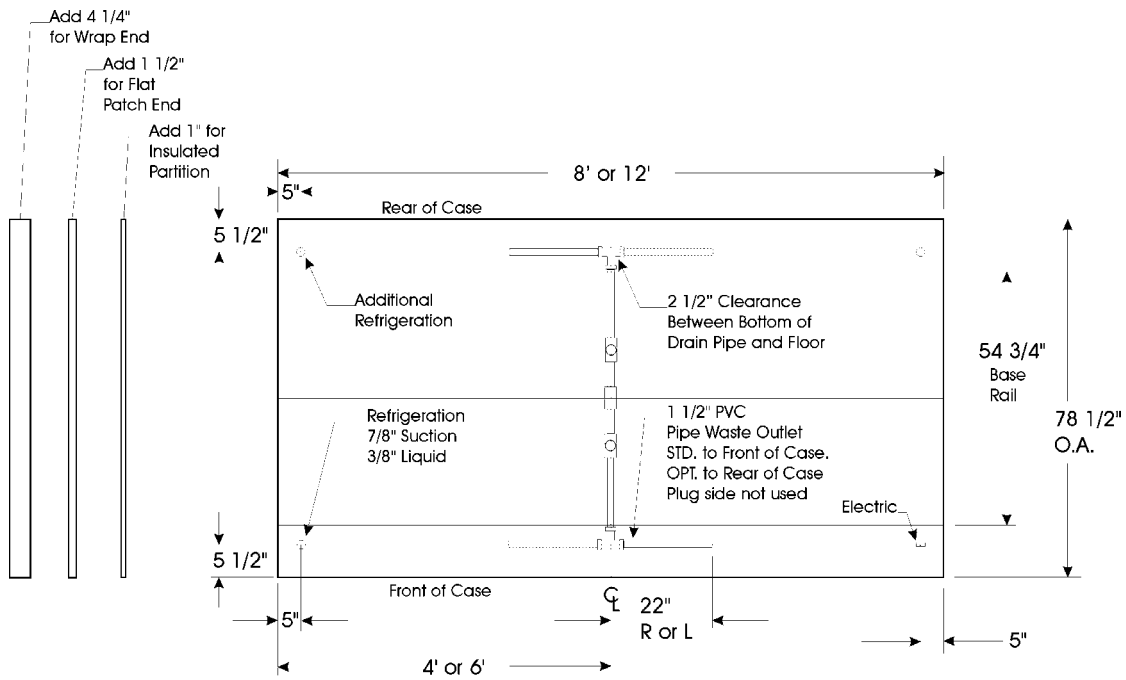
**DEFROST WIRING:** There are two defrost heater circuits in each case. The heater wiring stubs out in the 208V raceway as two pairs of wires. Defrost circuits can therefore be wired as a single phase load or they can be wired as an unbalanced 3-phase load. The 3-phase defrost information is based on dividing the heater loads as evenly as possible across the phases.

**NOTE:** Optional shelving superstructures with lights have the same electrical requirements per row of lights as the amps shown.

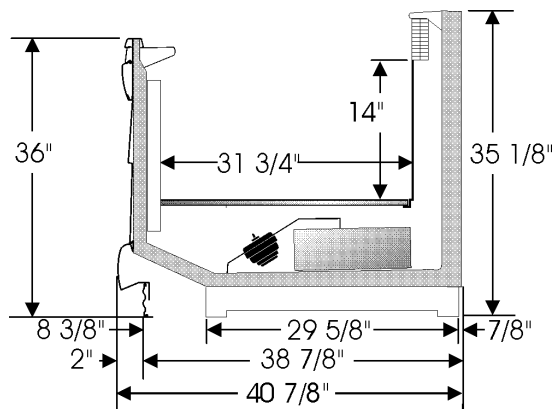
**NFJA/NCJA/NTJA CROSS SECTION**



**NFJA/NCJA/NTJA FLOOR PLAN**



**NFJEA/NCJEA END CASE CROSS SECTION**



**NFJEA/NCJEA END CASE FLOOR PLAN**

