

GENERAL REFRIGERATION NOTES

- COORDINATE ALL WORK WITH REFRIGERATION CONTRACTOR (R.C.) PRIOR TO INSTALLATION.
- REFRIGERATED CASES: PROVIDE CONDUIT AND WIRE FOR REFRIGERATED CASE FANS, LIGHTS, ANTI-SWEAT HEATERS, AND IF APPLICABLE, ELECTRIC DEFROST. PROVIDE ADEQUATE CONDUIT LENGTH TO ALLOW TERMINATION NEATLY BUNDLE CIRCUITS AND CLEARLY TAG AND LABEL EACH CIRCUIT WITH BRANCH CIRCUIT DESIGNATION AND REFRIGERATION SYSTEM NUMBER FOR FINAL TERMINATION AT CASE BY R.C. REF CASE CONNECTION WIRING DETAIL.
- WALK-IN UNITS: PROVIDE CONDUIT AND WIRE FOR EVAPORATOR COIL FANS (CF) AND (IF APPLICABLE) ELECTRIC DEFROST (ED). PROVIDE ADEQUATE CONDUIT LENGTH TO ALLOW TERMINATION NEATLY BUNDLE CIRCUITS AND CLEARLY TAG AND LABEL EACH CIRCUIT WITH BRANCH CIRCUIT DESIGNATION AND REFRIGERATION SYSTEM NUMBER FOR FINAL TERMINATION AT CASE BY R.C. REF EVAPORATOR COIL WIRING DETAIL.
- REFRIGERATED CASE WIRING COMPONENT REPRESENTED ON DRAWING BY REFERENCE BOX.
- KEEP PENETRATIONS THROUGH COOLER AND FREEZER DOORS TO A MINIMUM. ROUTE ALL CONDUITS SEPARATELY FROM FREEZERS AND COOLERS ON INSIDE OF BOX.
- UNDERSLAB CIRCUITS SHALL NOT BE ROUTED UNDER WALK-IN FREEZERS AND SHALL BE ROUTED ABOVE REFRIGERANT LINES WHERE THEY CROSS.
- CIRCUITS FOR REFRIGERATED CASES SERVED BY OVERHEAD REFRIGERATION PIPING ARE TO BE Routed DOWN FROM STRUCTURE AT THE SAME LOCATION AS THE REFRIGERATION PIPING AND EXTENDED TO THE FIRST CASE IN EACH SYSTEM. WIRE AND CONDUIT FOR SLAVE WIRING BETWEEN CASES SHALL BE PROVIDED BY THE R.C.
- ON GROUPS OF THREE OR MORE REFRIGERATED CASES WITH ELECTRIC DEFROST, R.C. SHALL CONNECT CASES TO CREATE A THREE-PHASE HEATER CIRCUIT. HEATER LOADS SHALL BE BALANCED BETWEEN PHASES AS EVENLY AS POSSIBLE. REF CASE DEFROST WIRING DETAIL.
- ROUTE REFRIGERATED CASE AND COIL FAN, LIGHTS, ANTI-SWEAT AND DEFROST BRANCH CIRCUITS TO WAREHOUSES PROVIDED AT REFRIGERATION EQUIPMENT.
- CIRCUITS FOR REFRIGERATED CASES SERVED BY UNDERSLAB REFRIGERATION PIPING ARE TO BE ROUTED UNDERSLAB. REFER TO CASE CONNECTION WIRING DETAIL.
- ALL UNDERSLAB CONDUITS SHALL BE 3/4" MINIMUM.
- PROVIDE A SEPARATE NEUTRAL FOR EACH BRANCH CIRCUIT SERVING REFRIGERATED CASES OR WALK-IN UNITS.

KEYNOTES

- 16.708 PROVIDE WIRING AND FINAL CONNECTIONS TO RECEPTACLE. RECEPTACLE FURNISHED WITH REFRIGERATED CASE.
- 16.711 POINT OF TRANSITION FROM EMT TO FLEX: PROVIDE CONDUIT AND BRANCH CIRCUITS FOR REFRIGERATED CASE FANS, LIGHTS, ANTI-SWEAT HEATERS, AND ELECTRICAL DEFROST (IF REQUIRED); TERMINATION TO REFRIGERATED CASE ELECTRICAL CONNECTION POINT BY R.C. REFER TO CASE CONNECTION WIRING DETAIL.
- 16.714 COOLER DOORS: PROVIDE WEATHERPROOF JUNCTION BOX FOR COOL FRAME POWER. FINAL CONNECTION BY R.C.
- 16.716 SLAVE WIRING BETWEEN REFRIGERATED CASES IN WAREHOUSE PROVIDED BY REFRIGERATION CONTRACTOR.
- 16.717 BUILDING AUTOMATION CONDUITS: PROVIDE RECESSED JUNCTION BOX WITH COVER PLATE FOR DIRECT CONDUIT CONNECTION AT 90° (UNLESS NOTED OTHERWISE). PROVIDE 3/4" CONDUIT WITH FULL WIRE FOR LOW VOLTAGE CABLES FROM JUNCTION BOX TO 6" ABOVE BOTTOM OF BAR JOIST IN SALES FLOOR ACCESSIBLE CEILING SPACE.
- 16.719 BUILDING AUTOMATION CONDUITS: PROVIDE 1" (UNLESS NOTED OTHERWISE) PVC CONDUIT WITH FULL WIRE UNDER FLOOR SLAB FOR LOW VOLTAGE CABLES. STUB CONDUIT THROUGH PIT SIDEWALLS A MINIMUM OF 2" WHERE UNDERSLAB CONDUIT IS SHOWN. CONTINUING UP IN WALL ADJACENT TO PIT. PROVIDE 1" CONDUIT WITH FULL WIRE ROUTED FROM 6" ABOVE BOTTOM OF BAR JOIST IN SALES FLOOR ACCESSIBLE CEILING SPACE AND CONNECT TO PVC CONDUIT STUBBED THROUGH PIT WALL.
- 16.723 REFRIGERATION BUILDING AUTOMATION SYSTEM CONTROLS PROVIDED BY BAS CONTRACTOR. ALL 120VAC FINAL TERMINATIONS AT ENCLOSURE BY R.C. VERIFY EXACT LOCATION OF ENCLOSURE WITH BAS CONTRACTOR.

ALL CONDUITS INSTALLED ON TOP OF WALK-IN COOLERS AND FREEZERS SHALL BE A MINIMUM OF 6" FROM ANY EDGE TO ALLOW SPACE FOR EDGE PROTECTION NETTING. DO NOT ROUTE CONDUITS ABOVE THE CEILING GRID ACCESS UNLESS CONDUITS ARE INSTALLED IN JOIST SPACE. REF ARCH.

STIPULATION FOR THE CONTRACTOR TO VERIFY THE EXISTING CONDITIONS AND THE LOCATION OF ALL UTILITIES PRIOR TO INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL ADJACENT PROPERTIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF ALL ADJACENT PROPERTIES.

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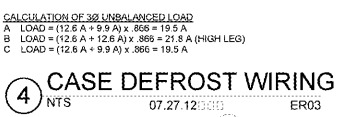
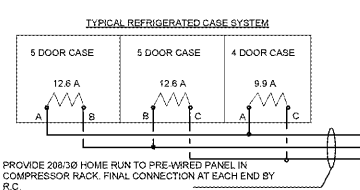
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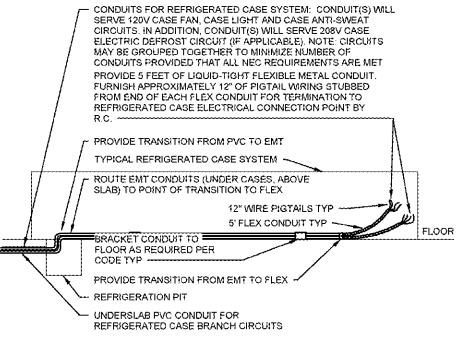
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REFRIG ELECTRICAL PLAN

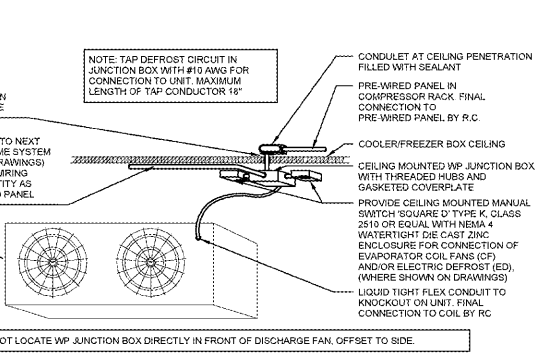
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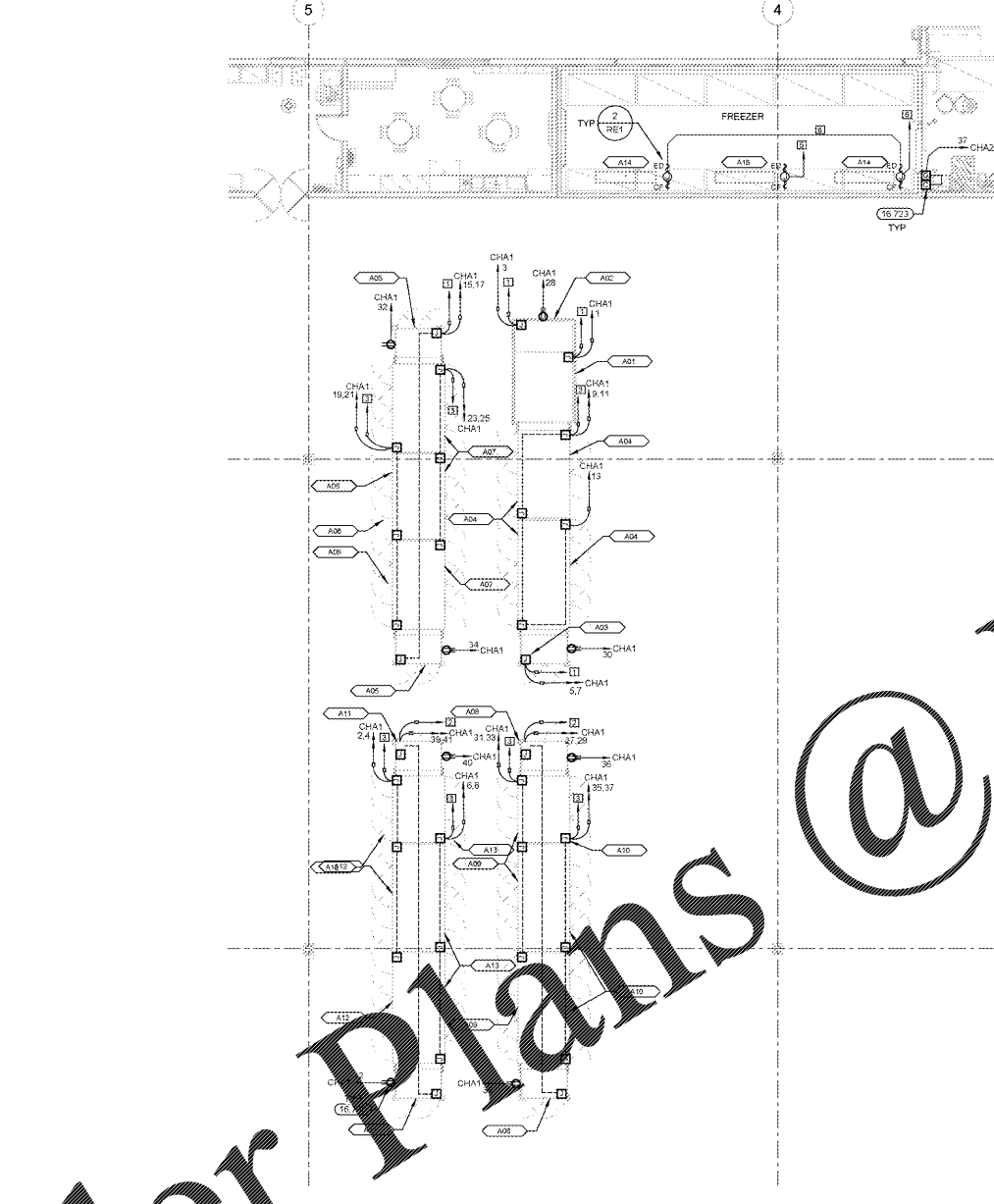
4 CASE DEFROST WIRING
NTS 07.27.12 ER03



3 CASE CONNECTION WIRING
NTS 07.25.03 ER02



2 EVAPORATOR COIL WIRING
NTS 07.27.12 ER01



NOTE: PROVIDE 120V LIQUID LINE SOLENOID VALVE WIRING (2 #12 W/1 #12 GND) AT EACH CIRCUIT. TERMINATION OF 120V WIRING AT CASE/EVAPORATOR SOLENOID VALVE AND AT BAS CONTROLLER BY R.C. SOLENOID WIRING NOT SHOWN ON PLAN FOR CLARITY. COORDINATE EXACT LOCATION OF SOLENOID VALVES WITH R.C. PRIOR TO INSTALLATION.

REFRIGERATED CASE ELECTRICAL DEFROST FEEDER SCHEDULE

NO.	CONDUIT SIZE	NUMBER AND SIZE OF COILS	EQ. GROUND WIRE	NOTES
1	2"	(2) #12	(1) #12	E.C. SHALL PROVIDE CONDUIT AND WIRE FOR REFRIGERATED CASE ELECTRICAL DEFROST TO DESIGNATED PANEL IN COMPRESSOR RACK. FINAL TERMINATIONS AT CASE AND AT COMPRESSOR RACK BY R.C. REF DETAILS 3-RE1 AND 4-RE1.
2	2"	(1) #10	(1) #10	
3	2"	(3) #8	(1) #10	

WALK-IN UNIT COOLER FEEDER SCHEDULE

NO.	CONDUIT SIZE	COIL FANS (CF)	ELECTRIC DEFROST (ED)	EQ. GROUND WIRE	NOTES
4	3/4"	(2) #12	(2) #12	(1) #12	E.C. SHALL PROVIDE CONDUIT AND WIRE FOR EVAP. COIL FAN (CF) AND ELECTRICAL DEFROST (ED) TO DESIGNATED PANEL IN COMPRESSOR RACK. FINAL TERMINATIONS AT COIL AND AT COMPRESSOR RACK BY R.C. REF DETAIL 2-RE1.
5	3/4"	(2) #12	(2) #8	(1) #8	
6	3/4"	(2) #12	(3) #12	(1) #12	
7	1/2"	(2) #12	(3) #10	(1) #10	

1 REFRIGERATION ELECTRICAL PLAN
1/8" = 1'-0" SCALE: 1/8" = 1'-0"

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