B21408
Thermo Fisher Austin TX
09/03/2021

SHEET INDEX

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G103 ..... FREEZER FLOOR HEAT LAYOUT
G104 ..... FREEZER THERMAL BREAK LAYOUT
G105 ..... FREEZER FLOOR DEPRESSION LAYOUT
G200 ..... LAB COOLER PLAN VIEW/THERMAL BREAK LAYOUT

REV	DESCRIPTION	BY	DATE

SIGNED APPROVAL

SIGNED _____

DATE _____

PLEASE READ

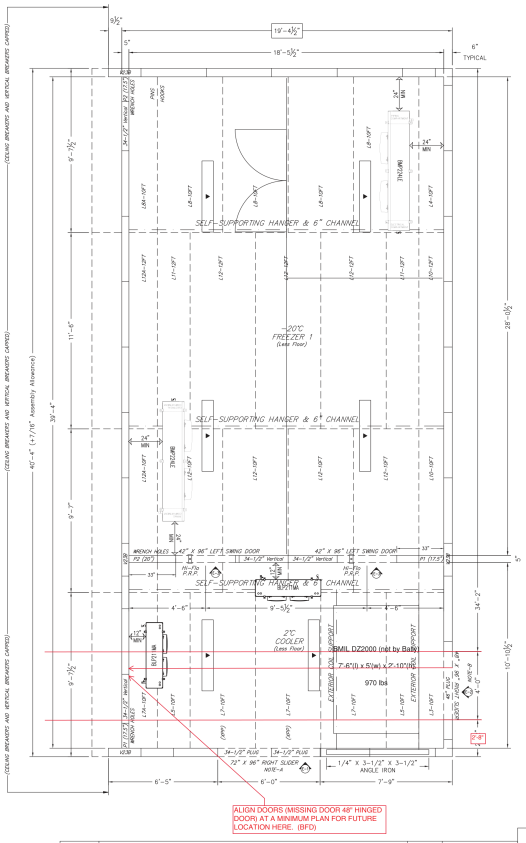
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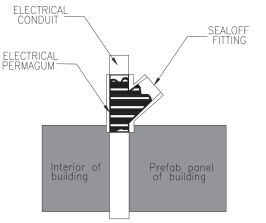
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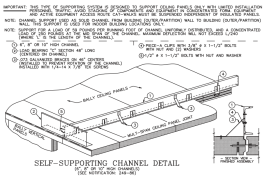
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PROPOSAL NUMBER	B21408	PROJECT NAME	THERMO FISHER AUSTIN TX
ORDER NUMBER	B21408 SIZE D	PROJECT LOCATION	AUSTIN, TX
PROJECT MANAGER	TRISTAN PORTER	DWG. NAME	TITLE SHEET
DRAWN BY	TRISTAN PORTER	SCALE: Not to Scale / DWG. DATE: 09/24/2021 / REV. DATE	

G90

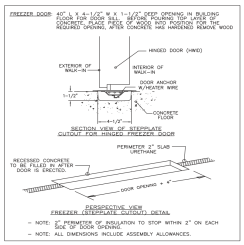


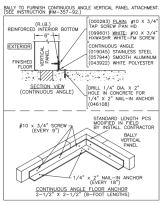




NOTE:

- **ALL PENETRATIONS SHOULD BE MADE IN WALLS, NOT IN CEILINGS UNLESS APPROVED BY BMIL**
- **NO CEILING PENETRATIONS SHOULD EVER BE BORED THROUGH ANY CEILING PANELS AT THE SEAMS**
- **ALL ELECTRICAL CONDUIT PASSING THROUGH COOLER/FREEZER MUST BE THERMALLY NON-CONDUCTIVE MATERIAL AND INSULATED FOR 3' ON THE WARM SIDE**
- **ALL CONDUIT MUST BE SEALED INTERNALLY TO PREVENT MIGRATION OF WATER VAPOR**
- **ALL TRADES TO REQUEST METAL PANEL PENETRATION SCHEDULING WITH REFRIGERATION CONTRACTOR (REFC)**
- **SPRINKLER PIPES MUST BE INSULATED FOR 3' ON THE WARM SIDE OF THE INSULATED METAL PANELS FOR PIPES 2" DIAMETER OR LESS**
- **SPRINKLER PIPES MUST BE INSULATED FOR 8' ON THE WARM SIDE OF THE INSULATED METAL PANELS FOR PIPES MORE THAN 2" DIAMETER**





SPECIFICATIONS

40'-4" x 19'-4 1/2" x 12'-10" (Less Floor) (6" Panels W/5" Partitions)

INSTALLATION
- INDOOR
- LOADING HEIGHT - AT LEAST 10" OF OPEN SPACE MUST BE MAINTAINED BETWEEN TOP OF PRODUCT AND CEILING PANELS

INSULATION
- FOAMED IN-PLACE POURED URETHANE
- BALLY PANELS AND DOORS ARE CERTIFIED COMPLIANT WITH CURRENT FEDERAL DOE REGULATIONS FOR WALK IN COOLERS & FREEZERS
- BALLY PANELS AND DOORS EXCEED MINIMUM R-VALUES* FOR WALLS, CEILINGS AND FLOORS, EXCLUDING FLOORS, AND FREEZERS (MIN. R-32, EXCEPT FLOORS, WHICH ARE MIN. R-28).
*WHEN TESTED PER ASTM C518 TO FEDERAL REG. 431.304

EXTERIOR FINISH
- EMBOSSED WHITE GALVANIZED

INTERIOR FINISH
- EMBOSSED WHITE GALVANIZED

DOORS/ACCESSORIES
- (2) 42" X 78" LEFT SWING HINGED 5" WALK-IN DOOR
  Door Opening
  (2) Door Closer
  (2) Screw Type Stepplate
  (2) Hi-Flo Pressure Relief Port

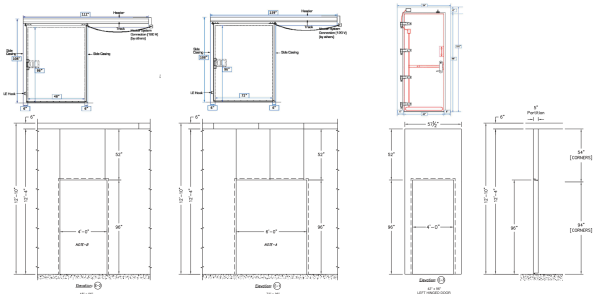
REFRIGERATION - BY BALLY (CONDENSING UNIT MOUNTED OUTDOORS)

	UNIT	UNIT TYPE	MODEL NUMBER	POWER	TEMPERATURE	TOTAL BTUH	SUCTION	AMPS	VOLTS	PHASE
FREEZER 1 =	1	AIR	BEHZ0600-HFE*	1 HP	-10°F	7,140	1	12.1	460	3
	1	AIR	BEHZ0600-CFE*	1 HP	-10°F/10°F	7,140	1	12.1	460	3
COOLER =	1	AIR	BEZ0609HE-CFE*	1/2 HP	25°F/35°F	3,312	1	7	460	3
	1		BEVC1MF-SFE*		25°F/35°F		1 3/8	9.6		

- ALL CONDENSATION DRAIN LINES MUST BE SIZED 1½"
- FREEZER CONDENSATION DRAIN LINES MUST BE HEATED, INSULATED AND TRAPPED INDIVIDUALLY BY OTHERS

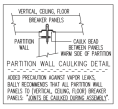
CEILING SUPPORT
- SELF SUPPORTING HANGER AND 6" CHANNEL SEE NOTIFICATION NO. IM-249-.005

GENERAL NOTES:
- NOTE-A: BALLY TO FURNISH (1) HARDY BOARD FRAMED OPENING (C-CAPPED); 6'-2" WIDE X 84" HIGH OPENING STARTS AT BOTTOM OF VERTICAL PANELS.
  [ ] C-CAPPING SHIPPED LOOSE FOR FIELD INSTALLATION.
  [NO LIGHT SWITCH WILL BE PROVIDED WITH THIS OPENING]
  SLIDING DOOR BY OTHERS.
- NOTE-B: BALLY TO FURNISH (1) HARDY BOARD FRAMED OPENING (C-CAPPED); 6'-2" WIDE X 84" HIGH OPENING STARTS AT BOTTOM OF VERTICAL PANELS.
  [ ] C-CAPPING SHIPPED LOOSE FOR FIELD INSTALLATION.
  [NO LIGHT SWITCH WILL BE PROVIDED WITH THIS OPENING]
  SLIDING DOOR BY OTHERS.
- NOTE: ALL WALL SURFACES WILL HAVE BEADING EVERY 5-3/4" APART.





NSF



NO WOOD

REV	DESCRIPTION	BY	DATE

SIGNED APPROVAL

SIGNED _____

DATE _____

PLEASE READ

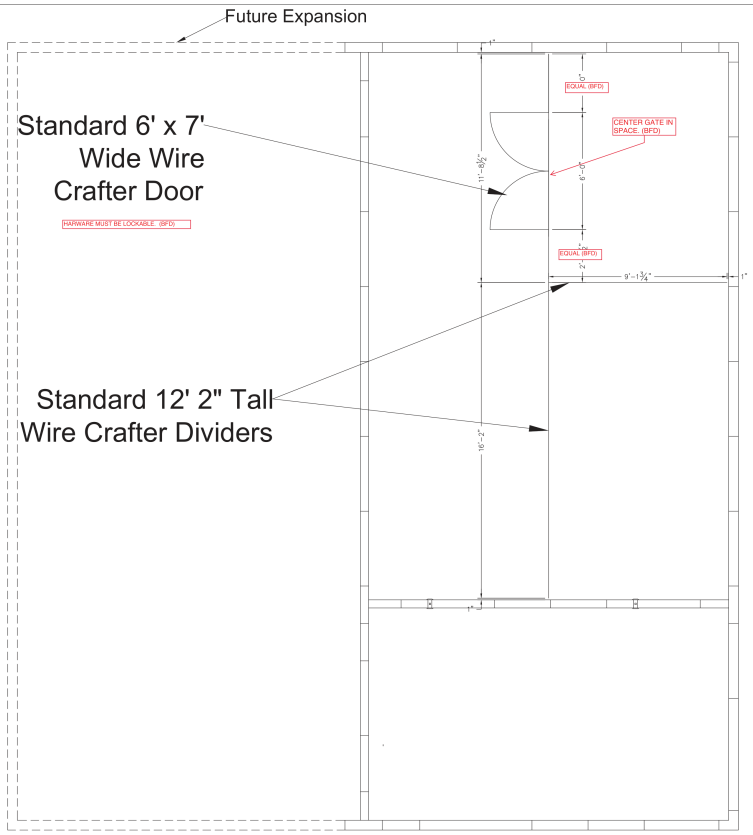
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PROPOSAL NUMBER	B21408	PROJECT NAME	THERMO FISHER AUSTIN TX
ORDER NUMBER	B21408	DIV. D	PROJECT LOCATION AUSTIN, TX
PROJECT MANAGER	TRISTAN PORTER		DWG. NAME FREEZER PLAN VIEW
DRAWN BY	TRISTAN PORTER	SCALE Not to Scale	DWG. DATE 09/24/2021 REV. DATE

G100



FREEZER WIRE CRAFTER DIVIDER LAYOUT

REV	DESCRIPTION	BY	DATE

SIGNED APPROVAL

SIGNED _____

DATE _____

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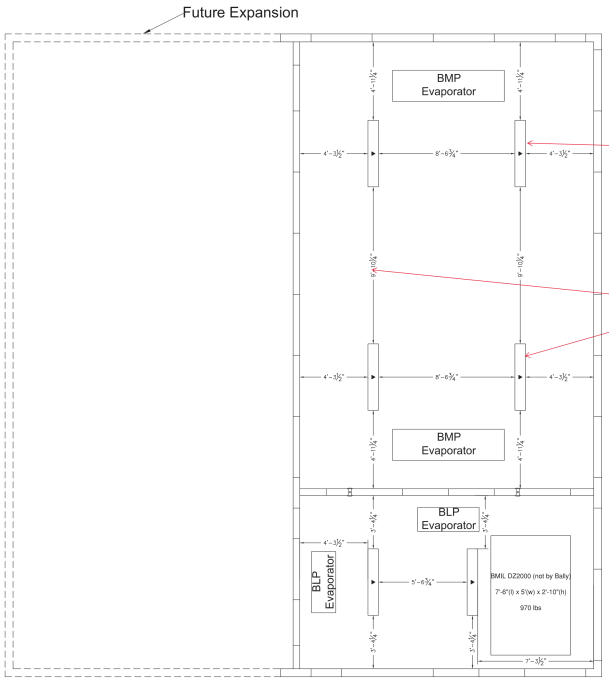
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PROPOSAL NUMBER	B21408	PROJECT NAME	THERMO FISHER AUSTIN TX
ORDER NUMBER	B21408 D	PROJECT LOCATION	AUSTIN, TX
PROJECT MANAGER	TRISTAN PORTER	DWG. NAME	FREEZER DIVIDER LAYOUT
DRAWN BY	TRISTAN PORTER	SCALE	Not to Scale
		DWG. DATE	09/24/2021
		REV. DATE	

G101



Evaporators moved per sheet G100

We recommend centering this fixture in space it serves.

We recommend adding another fixture to this space.

LIGHTING SCHEDULE

SYMBOL	MODEL	QTY	ROOM	AVERAGE FC	LOCATION	VOLTAGE
L01 4'-2"	TEGLED4-100D1L840	2	COOLER	47	FLUSH MOUNT	120 or 277 V
L02 4'-2"	TEGLED4-100D1L840	4	FREEZER	48	FLUSH MOUNT	120 or 277 V

FREEZER LIGHTING LAYOUT

REV	DESCRIPTION	BY	DATE

SIGNED APPROVAL

SIGNED _____

DATE _____

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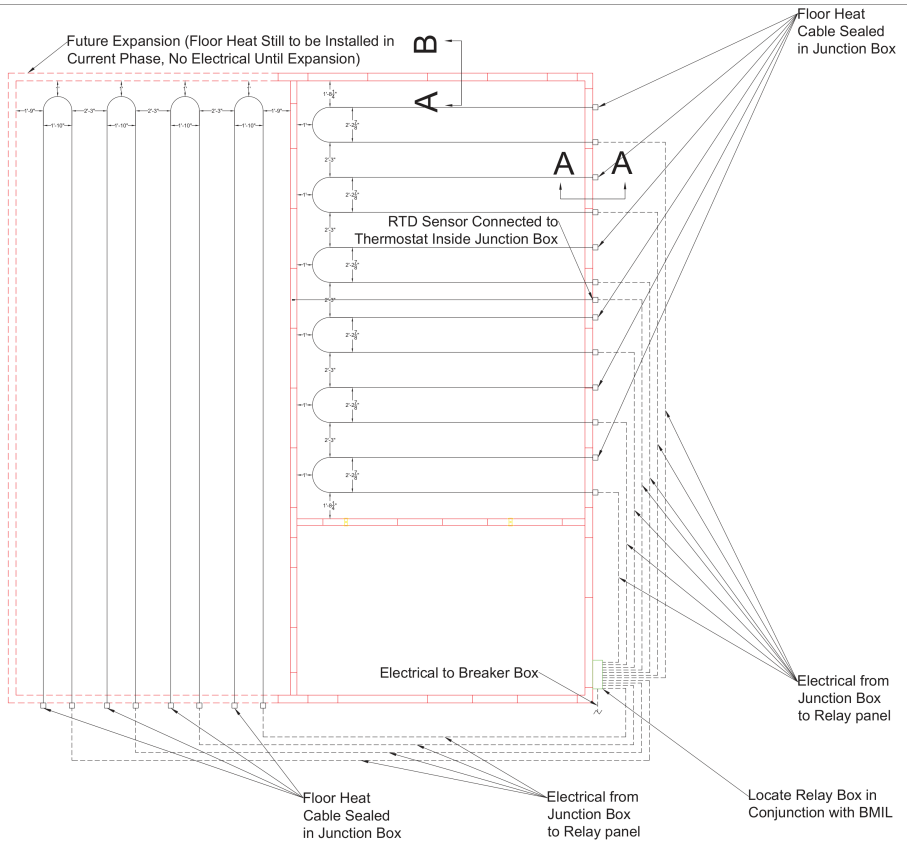
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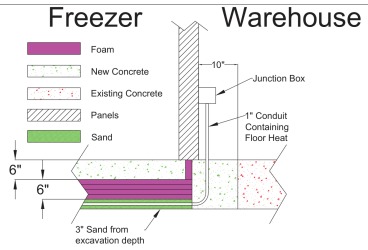
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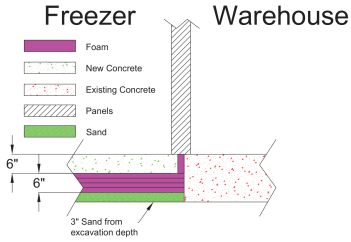
PROPOSAL NUMBER	B21408	PROJECT NAME	THERMO FISHER AUSTIN TX
ORDER NUMBER	B21408 D	PROJECT LOCATION	AUSTIN, TX
PROJECT MANAGER	TRISTAN PORTER	DWG. NAME	FREEZER LIGHTING LAYOUT
DRAWN BY	TRISTAN PORTER	SCALE: Not to Scale / DWG. DATE: 09/24/2021 / REV. DATE	

G102





FREEZER FLOOR
SECTION A-A



FREEZER FLOOR
SECTION A-B

NOTE

- All floor heat cable and RTD sensor installed into conduit in sub-floor (conduit and electrical by others).
- Two (2) floor heat cables in each loop of conduit. Only one (1) to be connected to power.
- Electrical can be daisy chained through junction boxes to reach relay panel.

FREEZER FLOOR HEAT LAYOUT

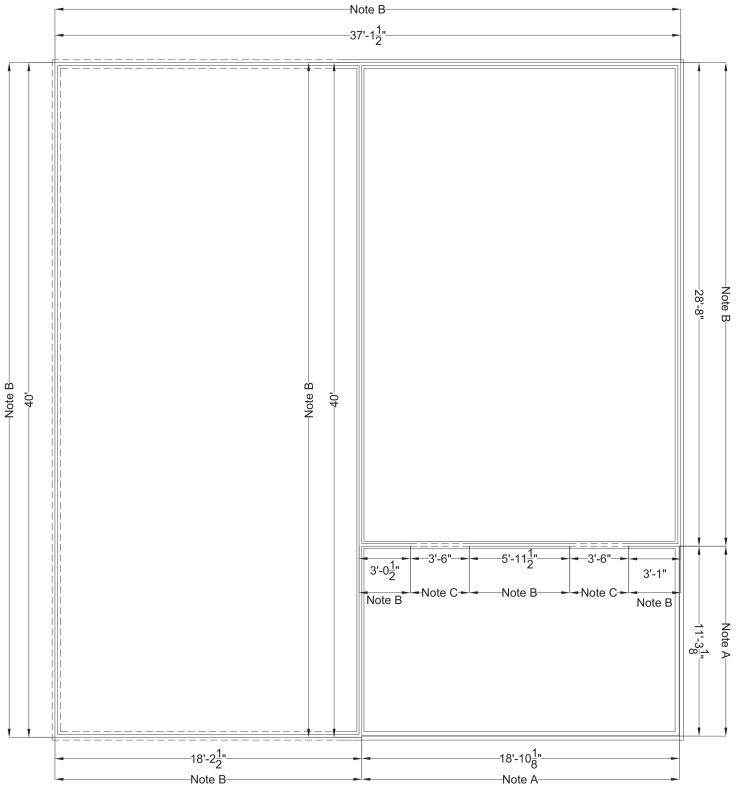
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DATE _____
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PROPOSAL NUMBER	B21408	PROJECT NAME	THERMO FISHER AUSTIN TX
ORDER NUMBER	B21408 D	PROJECT LOCATION	AUSTIN, TX
PROJECT MANAGER	TRISTAN PORTER	DWG. NAME	ELECTRIC FLOOR HEAT LAYOUT
DRAWN BY	TRISTAN PORTER	SCALE	Not to Scale
		DWG. DATE	09/24/2021
		REV. DATE	

G103



GENERAL NOTE
- ALL DIMENSION ARE TO OUTSIDE EDGE OF THERMAL BREAK

NOTE-A:
- 1/4" EXPANSION JOINTS FILL WITH POLYUREA

NOTE B
- 2" WIDE INSULATED THERMAL BREAK (FOAM BLOCK) DOWN TO THE FLOOR INSULATION

NOTE C
- 2" EXPANSION JOINT FILL WITH POLYUREA (UNDER DOORS)

FREEZER THERMAL BREAK LAYOUT

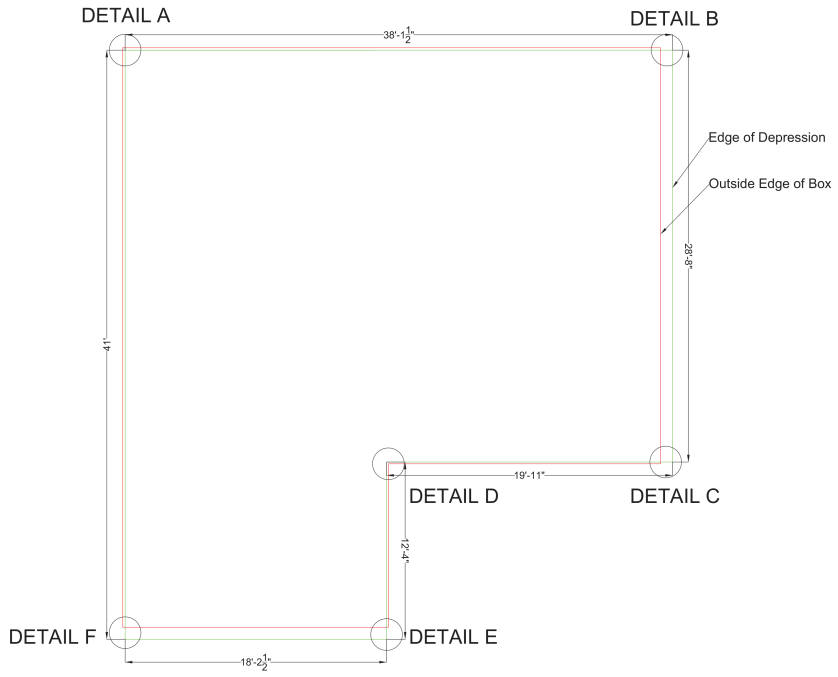
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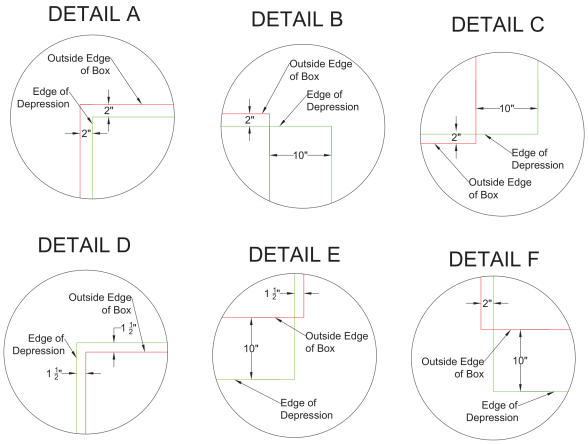
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ORDER NUMBER	B21408 D	PROJECT LOCATION	AUSTIN, TX
PROJECT MANAGER	TRISTAN PORTER	DWG. NAME	FREEZER THERMAL BREAK LAYOUT
DRAWN BY	TRISTAN PORTER	SCALE: Not to Scale / DWG. DATE: 09/24/2021 / REV. DATE	

G104



FREEZER FLOOR DEPRESSION LAYOUT



REV	DESCRIPTION	BY	DATE

SIGNED APPROVAL

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DATE _____

PLEASE READ

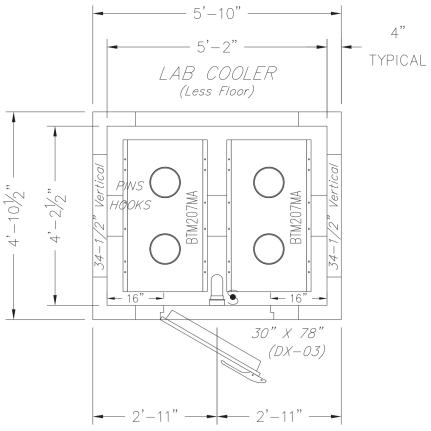
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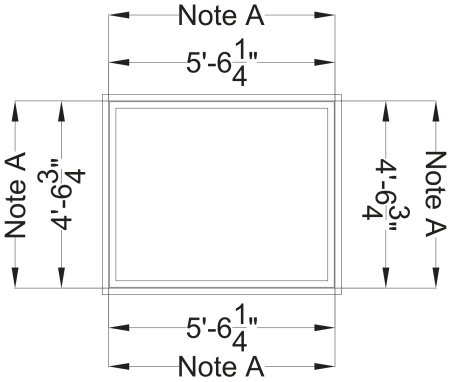
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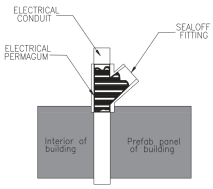
PROPOSAL NUMBER	B21408	PROJECT NAME	THERMO FISHER AUSTIN TX
ORDER NUMBER	B21408 SIZE D	PROJECT LOCATION	AUSTIN, TX
PROJECT MANAGER	TRISTAN PORTER	DWG. NAME	FREEZER FLOOR DEPRESSION LAYOUT
DRAWN BY	TRISTAN PORTER	SCALE	Not to Scale
		DWG. DATE	09/24/2021
		REV. DATE	

G105





LAB COOLER THERMAL BREAK LAYOUT



NOTE:
- **ALL PENETRATIONS SHOULD BE MADE IN WALLS, NOT IN CEILINGS UNLESS APPROVED BY BMIL**
- **NO CEILING PENETRATIONS SHOULD EVER BE BORED THROUGH ANY CEILING PANELS AT THE SEAMS**
- **ALL ELECTRICAL CONDUIT PASSING THROUGH COOLER/FREEZER MUST BE THERMALLY NON-CONDUCTIVE MATERIAL AND INSULATED FOR 3' ON THE WARM SIDE**
- **ALL CONDUIT MUST BE SEALED INTERNALLY TO PREVENT MIGRATION OF WATER VAPOR**
- **ALL TRADES TO REQUEST METAL PANEL PENETRATION SCHEDULING WITH REFRIGERATION CONTRACTOR (REFCO)**
- **SPRINKLER PIPES MUST BE INSULATED FOR 3' ON THE WARM SIDE OF THE INSULATED METAL PANELS FOR PIPES 2" DIAMETER OR LESS**
- **SPRINKLER PIPES MUST BE INSULATED FOR 5' ON THE WARM SIDE OF THE INSULATED METAL PANELS FOR PIPES MORE THAN 2" DIAMETER**

SPECIFICATIONS

5'–10" X 4'–10 1/2" X 11'–2" (Less Floor)

INSTALLATION
- INDOOR
- LOADING HEIGHT – AT LEAST 30" OF OPEN SPACE MUST BE MAINTAINED BETWEEN TOP OF PRODUCT AND CEILING PANELS

INSULATION
- FOAMED IN–PLACE POURED URETHANE
- BALLY PANELS AND DOORS ARE CERTIFIED COMPLIANT WITH CURRENT FEDERAL DOE REGULATIONS FOR WALK IN COOLERS & FREEZERS
- BALLY PANELS AND DOORS EXCEED MINIMUM R–VALUES* FOR COOLERS (MINIMUM R–25, EXCLUDING FLOORS), AND FREEZERS (MIN. R–32, EXCEPT FLOORS, WHICH ARE MIN. R–28). *WHEN TESTED PER ASTM C518 TO FEDERAL REG. 431.304

EXTERIOR FINISH
- EMBOSSED WHITE GALVANIZED

INTERIOR FINISH
- EMBOSSED WHITE GALVANIZED

DOORS/ACCESSORIES
- (1) 30" X 78" LEFT SWING HINGED WALK–IN DOOR

  Door Options:

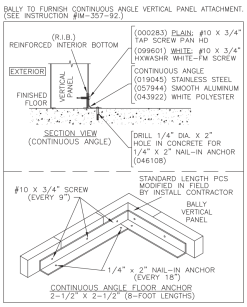
  (1) 3rd Hinge

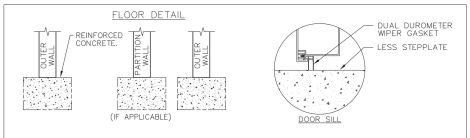
  (1) Loop Type Frame Heaters, Less Stepplate

REFRIGERATION – BY BALLY (CONDENSING UNIT MOUNTED OUTDOORS)

QTY	H/P	RFGT TYPE	MODEL NUMBER	POWER SUPPLY	COMPRESSOR RLA	LRA	FAN MTRS QTY	HP	FLA	TOTAL WATTS	AMPS	MCA	MAX FUSE	CMPT
2	0.7	R448A	GEZA0076B–HT3D	208–230/3/60	4.8	37.8	1		1		5.8	7	15	C
2			BTM207MA–S3D	115/1/60			2		0.3		0.6	0.7	15	C

– ALL CONDENSATION DRAIN LINES MUST BE SLOPED 1/2" INSTALLATION
– FREEZER CONDENSATION DRAIN LINES MUST BE HEATED, INSULATED AND TRAPPED INDIVIDUALLY. BY OTHERS





THERMAL BREAK LAYOUT NOTES

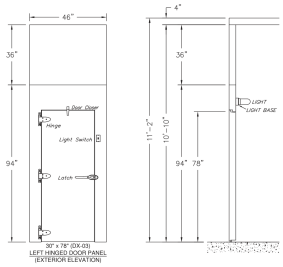
GENERAL NOTE
- ALL DIMENSION ARE TO OUTSIDE EDGE OF THERMAL BREAK

NOTE-A:
- 1/4" EXPANSION JOINTS FILL WITH POLYUREA



NSF

NO WOOD



REV	DESCRIPTION	BY	DATE

SIGNED APPROVAL

SIGNED _____

DATE _____

PLEASE READ

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PROPOSAL NUMBER	B21408
ORDER NUMBER	B21408
REV.	D
PROJECT MANAGER	TRISTAN PORTER
DRAWN BY	TRISTAN PORTER
PROJECT NAME	THERMO FISHER AUSTIN TX
PROJECT LOCATION	AUSTIN, TX
DWG. NAME	LAB COOLER PLAN VIEW/THERMAL BREAK
SCALE	Not to Scale
DWG. DATE	09/24/2021
REV. DATE	

G200