DATE 08/10/2007

Columbia County Building Permit

This Permit Expires One Year From the Date of Issue

PERMIT 000026119

APPLICANT WILLIAM A. JOHNSON PHONE 904-626-4733

ADDRESS 2900 HARTLEY RD JACKSONVILLE FL 32257

OWNER UNITED COLD STORAGE PHONE 856-354-4699

ADDRESS 211 NE MCCLOSKEY AVE LAKE CITY FL 32055

CONTRACTOR STELLAR GROUP PHONE 904-260-2900

LOCATION OF PROPERTY 90 EAST, L MCCLOSKEY AVE (OLD-STILL RD) THEN FIRST ON THE RIGHT

TYPE DEVELOPMENT COMM BLDG ESTIMATED COST OF CONSTRUCTION 0.00 17,000,000.00

HEATED FLOOR AREA 18300.00 TOTAL AREA 191126.00 HEIGHT 46.00 STORIES 1

FOUNDATION CONCRETE WALLS FRAMED ROOF PITCH 1/4 FLOOR SLAB

LAND USE & ZONING INDUSTRIAL MAX. HEIGHT

Minimum Set Back Requirments: STREET-FRONT 20.00 REAR 15.00 SIDE 15.00

NO. EX.D.U. 0 FLOOD ZONE X DEVELOPMENT PERMIT NO.

PARCEL ID 36-3S-17-07463-004 SUBDIVISION

LOT BLOCK PHASE UNIT TOTAL ACRES 29.21

Culvert Permit No.	Culvert Waiver	Contractor's License Number	Applicant/Owner/Contractor	
		CGC052029	William A Johnson	
SDP 07-1	X07-182	BK	JH	Y
Driveway Connection	Septic Tank Number	LU & Zoning checked by	Approved for Issuance	New Resident

COMMENTS: SDP 07-1. FLOOR ELEVATION IS SET @ 204.33 & MECHANICAL RM IS SET @ 200.00 PER PLANS.MFE CONFIRMATION LETTER NEEDED AT SLAB

Check # or Cash 451042

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power _____ date/app. by

Foundation _____ date/app. by

Monolithic _____ date/app. by

Under slab rough-in plumbing _____ date/app. by

Slab _____ date/app. by

Sheathing/Nailing _____ date/app. by

Framing _____ date/app. by

Rough-in plumbing above slab and below wood floor _____ date/app. by

Electrical rough-in _____ date/app. by

Heat & Air Duct _____ date/app. by

Peri. beam (Lintel) _____ date/app. by

Permanent power _____ date/app. by

C.O. Final _____ date/app. by

Culvert _____ date/app. by

M/H tie downs, blocking, electricity and plumbing _____ date/app. by

Pool _____ date/app. by

Reconnection _____ date/app. by

Pump pole _____ date/app. by

Utility Pole _____ date/app. by

M/H Pole _____ date/app. by

Travel Trailer _____ date/app. by

Re-roof _____ date/app. by

BUILDING PERMIT FEE $ 85,205.00 CERTIFICATION FEE $ 955.63 SURCHARGE FEE $ 955.63

MISC. FEES $ 0.00 ZONING CERT. FEE $ 50.00 FIRE FEE $ 0.00 WASTE FEE $

FLOOD DEVELOPMENT FEE $ FLOOD ZONE FEE $ 25.00 CULVERT FEE $ **TOTAL FEE $87,191.26**

INSPECTORS OFFICE Laurie Jackson CLERKS OFFICE CH

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

This Permit Must Be Prominently Posted on Premises During Construction

PLEASE NOTIFY THE COLUMBIA COUNTY BUILDING DEPARTMENT AT LEAST 24 HOURS IN ADVANCE OF EACH INSPECTION, IN ORDER THAT IT MAY BE MADE WITHOUT DELAY OR INCONVIENCE, PHONE 758-1008. THIS PERMIT IS NOT VALID UNLESS THE WORK AUTHORIZED BY IT IS COMMENCED WITHIN 6 MONTHS AFTER ISSUANCE.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

ck 451042

Columbia County Building Permit Application

Revised 9-23-04

For Office Use Only Application # 0705-84 Date Received 5/31/07 By CS Permit # 26119

Application Approved by - Zoning Official BLK Date 26.07.07 Plans Examiner OKJTH Date 7-26-07

Flood Zone X Development Permit N/A Zoning I Land Use Plan Map Category I

Comments Per SDP 07-1 FF to be at 204.33' Elevation Confirmation Letter Required

Applicants Name Jason Wright William A. Johnson Phone 904-626-4733

Address 2900 Hartley Road Jacksonville, FL 32257

Owners Name United States Cold Storage Phone 856-354-4699

911 Address 211 NE McCloskey Ave. Lake City fl 32055

Contractors Name The Stellar Group Phone 904-260-2900

Address 2900 Hartley Road Jacksonville, FL 32257

Fee Simple Owner Name & Address United States Cold Storage 100 Dobbs Lane Cherry Hill, NJ 08034

Bonding Co. Name & Address N/A

Architect/Engineer Name & Address The Stellar Group 2900 Hartley Road Jacksonville, FL 32257

Mortgage Lenders Name & Address N/A

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy

Property ID Number 38-35-17-07483-004 07483-004 Estimated Cost of Construction $17,041 Above Foundation

Subdivision Name 36-35-17-07463-004 Lot ____ Block ____ Unit ____ Phase ____

Driving Directions 90 East to McCloskey Ave (Old Still Rd) 1st on the Right

Type of Construction Industrial Number of Existing Dwellings on Property 1

Total Acreage 29.21 Lot Size _____ Do you need a - Culvert Permit or Culvert Waiver or Per SDP 07-1 Have an Existing Drive

Actual Distance of Structure from Property Lines - Front _____ Side _____ Side _____ Rear _____

Total Building Height 46'-0" Number of Stories 1 Heated Floor Area 18,300 SF 19,126 Roof Pitch 1/8" Warehouse 1/4" Building

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

OWNERS AFFIDAVIT: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

Owner Builder or Agent (Including Contractor)

Contractor Signature

Contractors License Number CGC052029

Competency Card Number DD 265909

STATE OF FLORIDA
COUNTY OF COLUMBIA

NOTARY STAMP/SEAL

LINDSEY M. FUENTES
Notary Public, State of Florida
My Comm. Expires Feb. 7, 2011
Comm. No. DD 637319

Sworn to (or affirmed) and subscribed before me this 30th day of May 20 07.

Personally known ✓ or Produced Identification _____

Notary Signature

AREA SUMMARY:

WAREHOUSE TOTAL	**162,859 SF**
-20°F FREEZER W/ PENT.	95,000 SF
(2) CONVERTIBLE W/ PENT.	39,188 SF
+40°F REFRIG. DOCK	28,671 SF
MAINTENANCE TOTAL	**6,066 SF**
BATTERY CHARGING	1,709 SF
MAINTENANCE	1,497 SF
FIRE PROTECTION	465 SF
WAREHOUSE SUPPLIES/ MAINT. MEZZANINE	423 SF
CHIEF ENGINEER	321 SF
ELECTRICAL ROOM	689 SF
USDA OFFICE & RESTROOM	239 SF
USDA INSPECTION	723 SF
MACHINE ROOM	**3,750 SF**
MACHINE ROOM	3,750 SF
WELFARE	**3,232 SF**
LUNCH ROOM	1,460 SF
MEN'S LOCKER	989 SF
MEN'S TOILET	454 SF
WOMEN'S LOCKER TOILET	329 SF
ADMINISTRATION TOTAL	**15,219 SF**
WORKSTATION	380 SF
SUPERVISOR OFFICE	197 SF
DRIVER'S LOUNGE	512 SF
MEN'S TOILET	173 SF
WOMEN'S TOILET	173 SF
COFFEE AREA	89 SF
CONFERENCE	398 SF
CORR. 305	118 SF
CORR. 511	222 SF
JANITOR CLOSET	72 SF
GENERAL OFFICE	2143 SF
(4) PRIVATE OFFICES	777 SF
TOILET (MENS)	82 SF
TOILET (WOMENS)	82 SF
2ND FL. ELECTRICAL ROOM	110 SF
TELE. ROOM	97 SF
ELEVATOR ROOM	61 SF
FUTURE SECOND LEVEL	6,884 SF
STAIR 502	221 SF
STAIR 514	228 SF
2ND FL. STAIR 502	221 SF
2ND FL. STAIR 514	228 SF
VESTIBULE	77 SF
OPEN OFFICE	1,054 SF
LOBBY	564 SF
ELEVATOR	56 SF
TOTAL	**191,126 SF**

Office Charged for 18,300 Heated

Total

191,126 total
- 18,300 Heated
172,862 Warehouse

50,000 maximum
920.00

for assessments per Marsha Moore 2/20/08 J.H.

Columbia County Property Appraiser

DB Last Updated: 5/11/2007

Parcel: 36-3S-17-07463-004

2007 Proposed Values

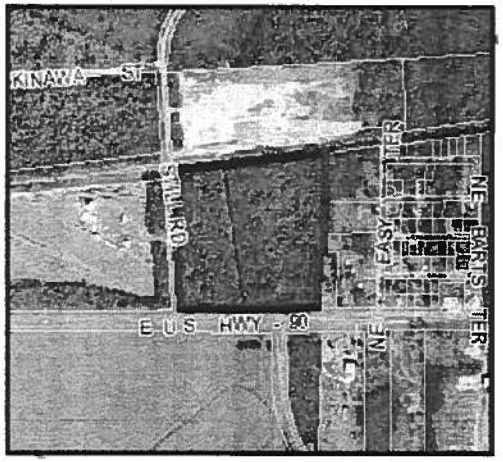
Tax Record | Property Card | Interactive GIS Map | Print

Search Result: 1 of 1

Owner & Property Info

Owner's Name	UNITED STATES COLD STORAGE INC		
Site Address			
Mailing Address	100 DOBBS LANE SUITE 102 CHERRY HILL, NJ 08034		
Use Desc. (code)	VACANT IND (004000)		
Neighborhood	36317.00	**Tax District**	2
UD Codes	MKTA06	**Market Area**	06
Total Land Area	29.500 ACRES		
Description	COMM NW COR, RUN S 960.90 FT, E ALONG RR R/W 1843.94 FT FOR POB, RUN E 1220.74 FT TO E LINE OF W1/2 OF NW1/4 OF NE1/4 S 766.03 FT, W 35.98 FT, S 411.3 FT TO US-90, W 341.45 FT, S 10 FT, W 600.17 FT, N 10 FT, W 125.52 FT, N 1041.57 FT TO POB. ORB 461-412, 879-071, WD 1081-2429		

GIS Aerial



Property & Assessment Values

Mkt Land Value	cnt: (1)	$575,250.00
Ag Land Value	cnt: (0)	$0.00
Building Value	cnt: (0)	$0.00
XFOB Value	cnt: (0)	$0.00
Total Appraised Value		$575,250.00

Just Value	$575,250.00
Class Value	$0.00
Assessed Value	$575,250.00
Exempt Value	$0.00
Total Taxable Value	$575,250.00

Sales History

Sale Date	Book/Page	Inst. Type	Sale VImp	Sale Qual	Sale RCode	Sale Price
4/19/2006	1081/2429	WD	V	Q		$730,300.00
4/16/1999	879/71	WD	V	Q		$187,900.00
11/1/1978	415/542	03	V	Q		$10,400.00

Building Characteristics

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value

Florida Energy Efficiency Code For Building Construction

Florida Department of Community Affairs

FLA/COM 2004 v2.5 -- Form 400A-2004

Method A: Whole Building Performance Method for Commercial Buildings

PROJECT SUMMARY

Short Desc:	New Prj	**Description:**	United States Cold Storage, I
Owner:	United States Cold Storage, INC		
Address1:	_	**City:**	Lake City
Address2:	_	**State:**	Florida
		Zip:	0
Type:	Warehouse	**Class:**	New Finished building
Jurisdiction:	LAKE CITY, COLUMBIA COUNTY, FL (221200)		
Cond Area:	9642 SF	**Cond & UnCond Area:**	9642 SF
No of Storeys:	1	**Area entered from Plans**	0 SF
Permit No:	0	**Max Tonnage**	23
		If different, write in:	_____

Compliance Summary

Component	Design	Criteria	Result
Gross Energy Use	9,845.6	11,797.7	**PASSES**
LIGHTING CONTROLS			**PASSES**
EXTERNAL LIGHTING			**None Entered**
HVAC SYSTEM			**PASSES**
PLANT			**None Entered**
WATER HEATING SYSTEMS			**PASSES**
PIPING SYSTEMS			**PASSES**
Met all required compliance from Check List?			**Yes/No/NA**

IMPORTANT NOTE: An input report of this design building must be submitted along with this Compliance Report.

CERTIFICATIONS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code

Prepared By: _____ Building Official: _____

Date: 05/31/07 Date: _____

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: _____ Date: _____

If Required by Florida law, I hereby certify (*) that the system design is in compliance with the FLorida Energy Efficiency Code

Architect:	Rex R Smith	Reg No: AR13370
Electrical Designer:	Michael T Vranesh, Jr.	Reg No: 43833
Lighting Designer:	Michael T Vranesh, Jr.	Reg No: 43833
Mechanical Designer:	William M Weaver	Reg No: 63146
Plumbing Designer:	William M Weaver	Reg No: 63146

(*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: New Prj
Title: United States Cold Storage, INC
Type: Warehouse
(WEA File: JACKSONVILLE.TMY)

Building End Uses

	Design	Reference
Total	*83.79*	*100.00*
	$9,846	*$11,798*
ELECTRICITY(MBtu/kWh/$)	83.79 193811 *$9,846*	100.00 231328 *$11,798*
AREA LIGHTS	19.24 44519 *$2,262*	13.68 31658 *$1,615*
MISC EQUIPMT	5.27 12198 *$620*	5.27 12198 *$622*
PUMPS & MISC	0.05 109 *$6*	0.05 118 *$6*
SPACE COOL	41.13 95142 *$4,833*	50.84 117580 *$5,997*
VENT FANS	18.09 41843 *$2,126*	30.16 69774 *$3,558*

Credits & Penalties (if any): Modified Points: = 83.79 PASSES

External Lighting Compliance

Description	Category	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)

None

Project: New Prj
Title: United States Cold Storage, INC
Type: Warehouse
(WEA File: JACKSONVILLE.TMY)

Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	No. of Tasks	Design CP	Min CP	Compli-ance
Pr0Zo1Sp1	,002	Dressing/Locker/Fitting Room (General)	924	1	1	1	PASSES
Pr0Zo1Sp2	6	Toilet and Washroom	396	1	1	1	PASSES
Pr0Zo1Sp3	6	Toilet and Washroom	260	1	1	1	PASSES
Pr0Zo1Sp4	2	Storage & Warehouse - Inactive Storage	60	1	1	1	PASSES
Pr0Zo1Sp5	9	Food Service - Bar/Lounge	440	1	1	1	PASSES
Pr0Zo1Sp6	9	Food Service - Bar/Lounge	924	1	3	1	PASSES
Pr0Zo1Sp7	5	Corridor	98	1	1	1	PASSES
Pr0Zo2Sp1	16	Office - Open Plan	1,000	1	2	1	PASSES
Pr0Zo2Sp2	16	Office - Open Plan	345	1	2	1	PASSES
Pr0Zo2Sp3	17	Office - Enclosed	165	1	2	1	PASSES
Pr0Zo2Sp4	9	Food Service - Bar/Lounge	450	1	1	1	PASSES
Pr0Zo2Sp5	6	Toilet and Washroom	56	1	1	1	PASSES
Pr0Zo2Sp6	6	Toilet and Washroom	56	1	1	1	PASSES
Pr0Zo2Sp7	12	Lobby (General) - Reception and Waiting	741	1	1	1	PASSES
Pr0Zo2Sp8	6	Toilet and Washroom	150	1	1	1	PASSES
Pr0Zo2Sp9	6	Toilet and Washroom	140	1	1	1	PASSES
Pr0Zo2Sp10	5	Corridor	120	1	1	1	PASSES
Pr0Zo2Sp11	17	Office - Enclosed	288	1	2	1	PASSES
Pr0Zo2Sp12	17	Office - Enclosed	120	1	2	1	PASSES
Pr0Zo2Sp13	17	Office - Enclosed	120	1	2	1	PASSES
Pr0Zo2Sp14	17	Office - Enclosed	120	1	2	1	PASSES
Pr0Zo2Sp15	17	Office - Enclosed	84	1	1	1	PASSES
Pr0Zo2Sp16	15	Conference/meeting (Multiple Functions)	345	1	3	1	PASSES
Pr0Zo2Sp17	16	Office - Open Plan	2,240	1	6	1	PASSES

PASSES

Project: New Prj
Title: United States Cold Storage, INC
Type: Warehouse
(WEA File: JACKSONVILLE.TMY)

System Report Compliance

Pr0Sy1 **System 1 RTU-1** **Constant Volume Packaged System** **No. of Units 1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp-liance
Cooling System	Air Cooled 135000 to 240000 Btu/h Clg Capacity		14.70	9.70	15.80		PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume		0.71	0.90			PASSES

Pr0Sy2 **System 2 RTU-2** **Variable Air Volume Packaged System** **No. of Units 1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp-liance
Cooling System	Air Cooled 240000 to 760000 Btu/h Cooling Capacity		10.30	9.50	10.90	9.70	PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume		0.69	1.27			PASSES

PASSES

Plant Compliance

Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Comp liance

None

Project: New Prj
Title: United States Cold Storage, INC
Type: Warehouse
(WEA File: JACKSONVILLE.TMY)

Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Compliance
EWH-1	Electric water heater	<= 12 [kW]	98.00	0.85			PASSES
EWH-2	Electric water heater	<= 12 [kW]	98.00	0.85			PASSES
EWH-3	Electric water heater	<= 12 [kW]	98.00	0.82			PASSES

PASSES

Project: New Prj
Title: United States Cold Storage, INC
Type: Warehouse
(WEA File: JACKSONVILLE.TMY)

Piping System Compliance

Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Compliance
Domestic and Service Hot Water Systems	1.00	False	120.00	0.30	1.00	0.55	PASSES

PASSES

Project: New Prj
Title: United States Cold Storage, INC
Type: Warehouse
(WEA File: JACKSONVILLE.TMY)

Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
Infiltration	406.1	Infiltration Criteria have been met	☑
System	407.1	HVAC Load sizing has been performed	☑
Ventilation	409.1	Ventilation criteria have been met	☑
ADS	410.1	Duct sizing and Design have been performed	☑
T & B	410.1	Testing and Balancing will be performed	☑
Motors	414.1	Motor efficiency criteria have been met	☑
Lighting	415.1	Lighting criteria have been met	☑
O & M	102.1	Operation/maintenance manual will be provided to owner	☑
Roof/Ceil	404.1	R-19 for Roof Deck with supply plenums beneath it	☑
Report	101	Input Report Print-Out from EnergyGauge FlaCom attached?	☑

EnergyGauge Summit v3.10

INPUT DATA REPORT

Project Information

Project Name: New Prj
Project Title: United States Cold Storage, INC
Address:

State: Florida
Zip: 0

Owner: United States Cold Storage, INC

Orientation: North
Building Type: Warehouse
Building Classification: New Finished building

No.of Storeys: 1
GrossArea: 9642 SF

Zones

No	Acronym	Description	Type	Area [sf]	Multiplier	Total Area [sf]	
1	Pr0Zo1	Break Room	CONDITIONED	3102.0	1	3102.0	☐
2	Pr0Zo2	Zone 2	CONDITIONED	6540.0	1	6540.0	☐

Spaces

No	Acronym	Description	Type	Depth [ft]	Width [ft]	Height [ft]	Multiplier	Total Area [sf]	Total Volume [cf]	
In Zone: Pr0Zo1										
1	Pr0Zo1Sp1	Mens Locker 308	Dressing/Locker/Fitting Room (General)	21.00	44.00	9.00	1	924.0	8316.0	☐
2	Pr0Zo1Sp2	Mens Toilet 307	Toilet and Washroom	9.00	44.00	9.00	1	396.0	3564.0	☐
3	Pr0Zo1Sp3	Womens Toilet and Locker 306	Toilet and Washroom	10.00	26.00	9.00	1	260.0	2340.0	☐
4	Pr0Zo1Sp4	Janitor Closet 304	Storage & Warehouse - Inactive Storage	10.00	6.00	9.00	1	60.0	540.0	☐
5	Pr0Zo1Sp5	Vending Area 303	Food Service - Bar/Lounge	10.00	44.00	9.00	1	440.0	3960.0	☐
6	Pr0Zo1Sp6	Break Room 302	Food Service - Bar/Lounge	21.00	44.00	9.00	1	924.0	8316.0	☐
7	Pr0Zo1Sp7	Vestibule 301	Corridor	14.00	7.00	9.00	1	98.0	882.0	☐
In Zone: Pr0Zo2										
1	Pr0Zo2Sp1	Open Office 401	Office - Open Plan	20.00	50.00	9.00	1	1000.0	9000.0	☐
2	Pr0Zo2Sp2	Work Stations 403	Office - Open Plan	23.00	15.00	9.00	1	345.0	3105.0	☐
3	Pr0Zo2Sp3	Super Office 402	Office - Enclosed	11.00	15.00	9.00	1	165.0	1485.0	☐
4	Pr0Zo2Sp4	Drivers Lounge 404	Food Service - Bar/Lounge	15.00	30.00	9.00	1	450.0	4050.0	☐
5	Pr0Zo2Sp5	Womens 405	Toilet and Washroom	8.00	7.00	9.00	1	56.0	504.0	☐
6	Pr0Zo2Sp6	Mens 406	Toilet and Washroom	8.00	7.00	9.00	1	56.0	504.0	☐
7	Pr0Zo2Sp7	Lobby 501	Lobby (General) - Reception and Waiting	19.00	39.00	24.00	1	741.0	17784.0	☐
8	Pr0Zo2Sp8	Womens Toilet 512	Toilet and Washroom	15.00	10.00	9.00	1	150.0	1350.0	☐
9	Pr0Zo2Sp9	Mens Toilet 513	Toilet and Washroom	14.00	10.00	9.00	1	140.0	1260.0	☐
10	Pr0Zo2Sp10	Corr 511	Corridor	12.00	10.00	9.00	1	120.0	1080.0	☐
11	Pr0Zo2Sp11	Office 505	Office - Enclosed	24.00	12.00	9.00	1	288.0	2592.0	☐
12	Pr0Zo2Sp12	Office 506	Office - Enclosed	12.00	10.00	9.00	1	120.0	1080.0	☐
13	Pr0Zo2Sp13	Office 507	Office - Enclosed	12.00	10.00	9.00	1	120.0	1080.0	☐

14	Pr0Zo2Sp14	Office 508	Office - Enclosed	12.00	10.00	9.00	1	120.0	1080.0	☐
15	Pr0Zo2Sp15	Coffee Area 509	Office - Enclosed	7.00	12.00	9.00	1	84.0	756.0	☐
16	Pr0Zo2Sp16	Conference 510	Conference/meeting (Multiple Functions)	15.00	23.00	9.00	1	345.0	3105.0	☐
17	Pr0Zo2Sp17	General Office 503	Office - Open Plan	40.00	56.00	10.00	1	2240.0	22400.0	☐

Lighting

No	Type	Category	No. of Luminaires	Watts per Luminaire	Power [W]	Control Type	No.of Ctrl pts	
In Zone: Pr0Zo1								
In Space: Pr0Zo1Sp1								
1	Recessed Fluorescent - No vent	General Lighting	10	96	960	Manual On/Off	1	☐
In Space: Pr0Zo1Sp2								
1	Recessed Fluorescent - No vent	General Lighting	5	96	480	Manual On/Off	1	☐
In Space: Pr0Zo1Sp3								
1	Recessed Fluorescent - No vent	General Lighting	4	96	384	Manual On/Off	1	☐
In Space: Pr0Zo1Sp4								
1	Recessed Fluorescent - No vent	General Lighting	1	96	96	Manual On/Off	1	☐
In Space: Pr0Zo1Sp5								
1	Recessed Fluorescent - No vent	General Lighting	5	96	480	Manual On/Off	1	☐
In Space: Pr0Zo1Sp6								
1	Recessed Fluorescent - No vent	General Lighting	15	96	1440	Manual On/Off	3	☐
In Space: Pr0Zo1Sp7								
1	Recessed Fluorescent - No vent	General Lighting	1	96	96	Manual On/Off	1	☐
In Zone: Pr0Zo2								
In Space: Pr0Zo2Sp1								
1	Recessed Fluorescent - No vent	General Lighting	18	96	1728	Manual On/Off	2	☐
In Space: Pr0Zo2Sp2								

1	Recessed Fluorescent - No vent	General Lighting	6	96	576	Manual On/Off	2	☐
In Space: Pr0Zo2Sp3								
1	Recessed Fluorescent - No vent	General Lighting	2	96	192	Manual On/Off	2	☐
In Space: Pr0Zo2Sp4								
1	Recessed Fluorescent - No vent	General Lighting	7	96	672	Manual On/Off	1	☐
In Space: Pr0Zo2Sp5								
1	Recessed Fluorescent - No vent	General Lighting	1	96	96	Manual On/Off	1	☐
In Space: Pr0Zo2Sp6								
1	Recessed Fluorescent - No vent	General Lighting	1	96	96	Manual On/Off	1	☐
In Space: Pr0Zo2Sp7								
1	Compact Fluorescent	General Lighting	22	48	1056	Manual On/Off	1	☐
In Space: Pr0Zo2Sp8								
1	Recessed Fluorescent - No vent	General Lighting	3	96	288	Manual On/Off	1	☐
In Space: Pr0Zo2Sp9								
1	Recessed Fluorescent - No vent	General Lighting	3	96	288	Manual On/Off	1	☐
In Space: Pr0Zo2Sp10								
1	Recessed Fluorescent - No vent	General Lighting	3	96	288	Manual On/Off	1	☐
In Space: Pr0Zo2Sp11								
1	Recessed Fluorescent - No vent	General Lighting	3	96	288	Manual On/Off	2	☐
In Space: Pr0Zo2Sp12								
1	Recessed Fluorescent - No vent	General Lighting	2	96	192	Manual On/Off	2	☐
In Space: Pr0Zo2Sp13								
1	Recessed Fluorescent - No vent	General Lighting	2	96	192	Manual On/Off	2	☐
In Space: Pr0Zo2Sp14								
1	Recessed Fluorescent - No vent	General Lighting	2	96	192	Manual On/Off	2	☐
In Space: Pr0Zo2Sp15								
1	Recessed Fluorescent - No vent	General Lighting	2	96	192	Manual On/Off	1	☐
In Space: Pr0Zo2Sp16								

1	Recessed Fluorescent - No vent	General Lighting	6	96	576	Manual On/Off	2	☐
2	Compact Fluorescent	General Lighting	6	69	414	Manual Continuous Dimming	1	☐
In Space: Pr0Zo2Sp17								
1	Recessed Fluorescent - No vent	General Lighting	14	96	1344	Manual On/Off	3	☐
2	Compact Fluorescent	General Lighting	28	69	1932	Manual On/Off	3	☐

Walls

No	Description	Type	Width [ft]	H (Effec) [ft]	Multiplier	Area [sf]	Direction	Conductance [Btu/hr. sf. F]	Heat Capacity [Btu/sf.F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
In Zone: Pr0Zo1												
1	North Wall	10.5" Thermomass Panel	16.00	22.00	1	352.0	North	0.0687	19.927	113.61	14.6	☐
2	West Wall	10.5" Thermomass Panel	78.00	22.00	1	1716.0	West	0.0687	19.927	113.61	14.6	☐
In Zone: Pr0Zo2												
1	North Wall	7.25" Tilt-Up Panel, R-13 Insul, Gyp Bd	15.00	28.00	1	420.0	North	0.0752	17.750	95.04	13.3	☐
2	West Wall	7.25" Tilt-Up Panel, R-13 Insul, Gyp Bd	87.00	28.00	1	2436.0	West	0.0752	17.750	95.04	13.3	☐
3	South Wall	7.25" Tilt-Up Panel, R-13 Insul, Gyp Bd	98.00	28.00	1	2744.0	South	0.0752	17.750	95.04	13.3	☐
4	Pr0Zo2Wa4	7.25" Tilt-Up Panel, R-13 Insul, Gyp Bd	70.00	28.00	1	1960.0	East	0.0752	17.750	95.04	13.3	☐

Windows

No	Description	Type	Shaded	U [Btu/hr sf F]	SHGC	Vis.Tra	W [ft]	H (Effec) [ft]	Multiplier	Total Area [sf]	
In Zone: Pr0Zo1											
In Wall: Pr0Zo1Wa2											
1	Pr0Zo1Wa2Wi1	User Defined	No	0.5700	0.45	0.40	8.00	5.00	2	80.0	☐

In Zone: Pr0Zo2											
In Wall: Pr0Zo2Wa1											
1	Pr0Zo2Wa1Wi1	User Defined	No	0.5700	0.45	0.40	9.50	10.00	2	190.0	☐
2	Pr0Zo2Wa1Wi2	User Defined	No	0.5700	0.45	0.40	3.50	24.00	1	84.0	☐
In Wall: Pr0Zo2Wa2											
1	Pr0Zo2Wa2Wi1	User Defined	No	0.5700	0.45	0.40	7.50	10.00	4	300.0	☐
2	Pr0Zo2Wa2Wi2	User Defined	No	0.5700	0.45	0.40	10.00	24.00	1	240.0	☐
3	Pr0Zo2Wa2Wi3	User Defined	No	0.5700	0.45	0.40	8.00	5.00	4	160.0	☐
In Wall: Pr0Zo2Wa3											
1	Pr0Zo2Wa3Wi1	User Defined	No	0.5700	0.45	0.40	8.00	5.00	12	480.0	☐
In Wall: Pr0Zo2Wa4											
1	Pr0Zo2Wa4Wi1	User Defined	No	0.5700	0.45	0.40	8.00	5.00	4	160.0	☐

Doors

No	Description	Type	Shaded?	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/hr. sf. F]	Dens. [lb/cf]	Heat Cap. [Btu/sf. F]	R-Value [h.sf.F/Btu]	
In Zone: Pr0Zo1												
In Wall: Pr0Zo1Wa1												
1	Pr0Zo1Wa1Dr1	Polystyrene core (18 ga steel) 1	No	3.00	7.00	1	21.0	0.4982	0.00	0.00	2.01	☐
In Wall: Pr0Zo1Wa2												
1	Pr0Zo1Wa2Dr1	Polystyrene core (18 ga steel) 1	No	3.00	7.00	1	21.0	0.4982	0.00	0.00	2.01	☐
In Zone: Pr0Zo2												
In Wall: Pr0Zo2Wa1												
1	Pr0Zo2Wa1Dr1	Polystyrene core (18 ga steel) 1	No	3.00	7.00	1	21.0	0.4982	0.00	0.00	2.01	☐
In Wall: Pr0Zo2Wa4												
1	Pr0Zo2Wa4Dr1	Polystyrene core (18 ga steel) 1	No	3.00	7.00	2	21.0	0.4982	0.00	0.00	2.01	☐

Roofs

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Tilt [deg]	Cond. [Btu/hr. Sf. F]	Heat Cap [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]
In Zone: Pr0Zo1											

1	Pr0Zo1Rf1	Metal Deck, R-20 Insul, Membrane	44.00	78.00	1	3432.0	0.00	0.0494	0.38	10.88	20.3

Skylights

No	Description	Type	U [Btu/hr sf F]	SHGC	Vis.Trans	W [ft]	H (Effec) [ft]	Multiplier	Area [Sf]	Total Area [Sf]
In Zone:										
In Roof:										

Floors

No	Description	Type	Width [ft]	H (Effec) [ft]	Multiplier	Area [sf]	Cond. [Btu/hr. sf. F]	Heat Cap. [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]
In Zone:	Pr0Zo1									
1	Pr0Zo1Fl1	6" Concrete Slab, Carpet and Pad	44.00	78.00	1	3432.0	0.5780	14.00	140.00	1.73
In Zone:	Pr0Zo2									
1	Pr0Zo2Fl1	6" Concrete Slab, Carpet and Pad	81.00	90.00	1	7290.0	0.5780	14.00	140.00	1.73

Systems

Pr0Sy1 **System 1 RTU-1** **Constant Volume Packaged System** **No. Of Units 1**

Component	Category	Capacity	Efficiency	IPLV
1	Cooling System (Air Cooled 135000 to 240000 Btu/h Clg Capacity)	143800.00	14.70	15.80
2	Air Handling System -Supply (Air Handler (Supply) - Constant Volume)	3165.00	0.71	

Pr0Sy2	System 2 RTU-2	Variable Air Volume Packaged System	No. Of Units 1

Component	Category	Capacity	Efficiency	IPLV	
1	Cooling System (Air Cooled 240000 to 760000 Btu/h Cooling Capacity)	275700.00	10.30	10.90	☐
2	Air Handling System -Supply (Air Handler (Supply) - Variable Volume)	8100.00	0.69		☐

Plant

Equipment	Category	Size	Inst.No	Eff.	IPLV	
						☐

Water Heaters

	W-Heater Description	Capacity	Cap.Unit	I/P Rt.	Efficiency		Loss		
1	Electric water heater	60	[Gal]	5 [kW]	98.0000	[Ef]		[Btu/h]	☐
2	Electric water heater	60	[Gal]	5 [kW]	98.0000	[Ef]		[Btu/h]	☐
3	Electric water heater	80	[Gal]	6 [kW]	98.0000	[Ef]		[Btu/h]	☐

Ext-Lighting

Description	Category	No. of Luminaires	Watts per Luminaire	Area/Len/No. of units [sf/ft/No]	Control Type	Wattage [W]	
							☐

Piping

No	Type	Operating Temperature [F]	Insulation Conductivity [Btu-in/h.sf.F]	Nomonal pipe Diameter [in]	Insulation Thickness [in]	Is Runout?	
1	Domestic and Service Hot Water Systems	120.00	0.30	1.00	1.00	No	☐

Fenestration Used

Name	Glass Type	No. of Panes	Glass Conductance [Btu/h.sf.F]	SHGC	VLT	
Tinted, Insulated Window	User Defined	2	0.5700	0.4500	0.4000	☐

Materials Used

Mat No	Acronym	Description	Only R-Value Used	RValue [h.sf.F/Btu]	Thickness [ft]	Conductivity [Btu/h.ft.F]	Density [lb/cf]	SpecificHeat [Btu/lb.F]	
1001	ApLbMat1001	7-1/4" Concrete	No	0.6040	0.6040	1.0000	140.00	0.2000	☐
1002	ApLbMat1002	2-1/2" Concrete	No	0.2083	0.2083	1.0000	140.00	0.2000	☐
1003	ApLbMat1003	6" Concrete	No	0.5000	0.5000	1.0000	140.00	0.2000	☐
1004	ApLbMat1004	3.33 in. Insulation	No	11.1080	0.2777	0.0250	5.70	0.2000	☐
1005	ApLbMat1005	GYP OR PLAS BOARD,5/8IN	No	0.5663	0.0521	0.0920	50.00	0.2000	☐
1006	ApLbMat1006	Inside surface resistance	Yes	0.6900					☐
1007	ApLbMat1007	Outside surface resistance	Yes	0.3300					☐
1008	ApLbMat1008	CARPET W/RUBBER PAD	Yes	1.2300					☐
1009	ApLbMat1009	PLASTIC FILM SEAL	Yes	0.0100					☐
1010	ApLbMat1010	POLYURETHANE, 3IN,	No	19.2308	0.2500	0.0130	1.50	0.3800	☐
1011	ApLbMat1011	Metal Deck	No	0.0002	0.0050	26.0000	480.00	0.1000	☐
1012	ApLbMat1012	POLYURETHANE, EXP., 2IN,	No	12.8231	0.1667	0.0130	1.50	0.3800	☐

Constructs Used

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]

1033	Polystyrene core (18 ga steel) 1	No	Yes	0.50			2.0

Layer	Material No.	Material	Thickness [ft]	Framing Factor
1	284	Polystyrene core (18 ga steel) 1		0.000

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]
1060	Metal Deck, R-20 Insul, Membrane	No	No	0.05	0.38	10.88	20.3

Layer	Material No.	Material	Thickness [ft]	Framing Factor
1	1007	Outside surface resistance		0.000
2	1009	PLASTIC FILM SEAL		0.000
3	1010	POLYURETHANE, 3IN,	0.2500	0.000
4	1011	Metal Deck	0.0050	0.000
5	1006	Inside surface resistance		0.000

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]
1061	10.5" Thermomass Panel	No	No	0.07	19.93	113.61	14.6

Layer	Material No.	Material	Thickness [ft]	Framing Factor
1	1007	Outside surface resistance		0.000
2	1002	2-1/2" Concrete	0.2083	0.000
3	1012	POLYURETHANE, EXP., 2IN,	0.1667	0.000
4	1003	6" Concrete	0.5000	0.000
5	1006	Inside surface resistance		0.000

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1062	7.25" Tilt-Up Panel, R-13 Insul, Gyp Bd	No	No	0.08	17.75	95.04	13.3	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	1007	Outside surface resistance		0.000	☐
2	1001	7-1/4" Concrete	0.6040	0.000	☐
3	1004	3.33 in. Insulation	0.2777	0.000	☐
4	1005	GYP OR PLAS BOARD,5/8IN	0.0521	0.000	☐
5	1006	Inside surface resistance		0.000	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1063	6" Concrete Slab, Carpet and Pad	No	No	0.58	14.00	140.00	1.7	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	1003	6" Concrete	0.5000	0.000	☐
2	1008	CARPET W/RUBBER PAD		0.000	☐

System Checksums
By TSG

CV System — **Single Zone**

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 6 / 16
Outside Air: OADB/WB/HR: 92 / 77 / 116

	Space Sens. + Lat. Btu/h	Plenum Sens. + Lat Btu/h	Net Total Btu/h	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0	0	0	0
Skylite Cond	0	0	0	0
Roof Cond	0	10,458	10,458	6
Glass Solar	8,484	0	8,484	5
Glass Cond	635	0	635	0
Wall Cond	825	134	959	1
Partition	-2,012		-2,012	-1
Exposed Floor	0		0	0
Infiltration	0		0	0
Sub Total ==>	7,932	10,592	18,524	11
Internal Loads				
Lights	16,617	4,154	20,772	13
People	18,500		18,500	11
Misc	12,362	0	12,362	8
Sub Total ==>	47,479	4,154	51,633	32
Ceiling Load	14,559	-14,559	0	0
Ventilation Load	0	0	82,330	50
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	8,764		8,764	5
Exhaust Heat		0	0	0
Sup. Fan Heat			1,876	1
Ret. Fan Heat		0	0	0
Duct Heat Pkup		0	0	0
Reheat at Design			0	0
Grand Total ==>	78,735	187	163,128	100.00

CLG SPACE PEAK

Mo/Hr: Sum of
OADB: Peaks

	Space Sensible Btu/h	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0	0
Skylite Cond	0	0
Roof Cond	0	0
Glass Solar	9,283	13
Glass Cond	585	1
Wall Cond	856	1
Partition	-2,012	-3
Exposed Floor	0	0
Infiltration	0	0
Sub Total ==>	8,712	12
Internal Loads		
Lights	16,617	24
People	9,250	13
Misc	12,362	18
Sub Total ==>	38,229	54
Ceiling Load	14,702	21
Ventilation Load	0	0
Ov/Undr Sizing		
Exhaust Heat	8,764	12
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
Grand Total ==>	70,408	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 33

	Space Peak Space Sens Btu/h	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0	0	0.00
Skylite Cond	0	0	0.00
Roof Cond	0	-4,718	6.00
Glass Solar	0	0	0.00
Glass Cond	-1,564	-1,564	1.99
Wall Cond	-1,629	-2,497	3.18
Partition	-1,878	-1,878	2.39
Exposed Floor	0	0	0.00
Infiltration	0	0	0.00
Sub Total ==>	-5,071	-10,657	13.56
Internal Loads			
Lights	0	0	0.00
People	0	0	0.00
Misc	0	0	0.00
Sub Total ==>	0	0	0.00
Ceiling Load	-5,586	0	0.00
Ventilation Load	0	-67,928	86.44
Ov/Undr Sizing	0	0	0.00
Exhaust Heat		0	0.00
OA Preheat Diff.		0	0.00
RA Preheat Diff.		0	0.00
Additional Reheat		0	0.00
Grand Total ==>	-10,657	-78,585	100.00

TEMPERATURES

	Cooling	Heating
SADB	55.0	75.0
Plenum	90.1	66.2
Return	75.0	72.0
Ret/OA	83.2	52.7
Fn MtrTD	0.1	0.0
Fn BldTD	0.1	0.0
Fn Frict	0.4	0.0

AIRFLOWS

	Cooling	Heating
Vent	1,563	1,563
Infil	0	0
Supply	3,165	3,165
MinStop/Rh	0	0
Return	3,165	3,165
Exhaust	1,563	1,563
Rm Exh	0	0
Auxiliary	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	49.4	49.4
cfm/ft²	1.04	1.04
cfm/ton	232.83	
ft²/ton	223.85	
Btu/hr·ft²	53.61	-25.82
No. People	82	

COOLING COIL SELECTION

	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	13.6	163.1	100.3	3,165.0	83.2	69.3	85.6	54.5	53.1	58.1
Aux Clg	0.0	0.0	0.0	0	0	0	0	0	0	0
Opt Vent	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	13.6	163.1								

AREAS

	Gross Total ft²	Glass ft²	Glass (%)
Floor	3,043		
Part	655		
ExFlr	0		
Roof	3,043	0	0
Wall	1,110	80	7

HEATING COIL SELECTION

	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-78.6	3,165.0	52.7	75.0
Aux Htg	0.0	0	0	0
Preheat	-6.1	3,165	53	54
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-78.6			

System Checksums

By TSG

VAV System

Variable Volume Reheat (30% Min Flow Default)

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 8 / 17
Outside Air: OADB/WB/HR: 87 / 76 / 120

	Space Sens. + Lat. Btu/h	Plenum Sens. + Lat Btu/h	Net Total Btu/h	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0	0	0	0
Skylite Cond	0	0	0	0
Roof Cond	0	0	0	0
Glass Solar	71,485	0	71,485	26
Glass Cond	8,979	0	8,979	3
Wall Cond	3,237	1,963	5,201	2
Partition	-583		-583	0
Exposed Floor	0		0	0
Infiltration	0		0	0
Sub Total ==>	83,118	1,963	85,082	31
Internal Loads				
Lights	35,648	8,912	44,560	16
People	24,500		24,500	9
Misc	30,512	0	30,512	11
Sub Total ==>	90,660	8,912	99,572	37
Ceiling Load	1,601	-1,601	0	0
Ventilation Load	0	0	78,801	29
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	3,305		3,305	1
Exhaust Heat		-1,533	-1,533	-1
Sup. Fan Heat			6,638	2
Ret. Fan Heat		0	0	0
Duct Heat Pkup		0	0	0
Reheat at Design			0	0
Grand Total ==>	178,685	7,741	271,866	100.00

CLG SPACE PEAK

Mo/Hr: 10 / 17
OADB: 81

	Space Sensible Btu/h	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0	0
Skylite Cond	0	0
Roof Cond	0	0
Glass Solar	91,710	51
Glass Cond	4,123	2
Wall Cond	2,318	1
Partition	-583	0
Exposed Floor	0	0
Infiltration	0	0
Sub Total ==>	97,569	54
Internal Loads		
Lights	35,648	20
People	12,250	7
Misc	30,512	17
Sub Total ==>	78,410	43
Ceiling Load	1,468	1
Ventilation Load	0	0
Ov/Undr Sizing	3,631	2
Grand Total ==>	181,078	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 33

	Space Peak Space Sens Btu/h	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0	0	0.00
Skylite Cond	0	0	0.00
Roof Cond	0	0	0.00
Glass Solar	0	0	0.00
Glass Cond	-29,942	-29,942	18.40
Wall Cond	-6,127	-8,226	5.05
Partition	-533	-533	0.33
Exposed Floor	0	0	0.00
Infiltration	0	0	0.00
Sub Total ==>	-36,603	-38,701	23.78
Internal Loads			
Lights	0	0	0.00
People	0	0	0.00
Misc	0	0	0.00
Sub Total ==>	0	0	0.00
Ceiling Load	-537	0	0.00
Ventilation Load	0	-58,942	36.22
Ov/Undr Sizing	0	0	0.00
Exhaust Heat		447	-0.27
OA Preheat Diff.		0	0.00
RA Preheat Diff.		-65,557	40.28
Additional Reheat		0	0.00
Grand Total ==>	-37,140	-162,753	100.00

TEMPERATURES

	Cooling	Heating
SADB	55.0	79.1
Plenum	75.9	71.7
Return	76.0	71.8
Ret/OA	78.1	60.6
Fn MtrTD	0.1	0.0
Fn BldTD	0.2	0.0
Fn Frict	0.5	0.0

AIRFLOWS

	Cooling	Heating
Vent	1,356	1,356
Infil	0	0
Supply	8,125	4,718
MinStop/Rh	4,718	4,718
Return	8,125	4,718
Exhaust	1,356	1,356
Rm Exh	0	0
Auxiliary	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	16.7	28.7
cfm/ft²	1.24	0.72
cfm/ton	358.62	
ft²/ton	288.14	
Btu/hr·ft²	41.65	-24.93
No. People	49	

COOLING COIL SELECTION

	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	22.7	271.9	199.3	7,467.8	78.1	64.2	67.7	54.2	51.9	53.8
Aux Clg	0.0	0.0	0.0	0	0	0	0	0	0	0
Opt Vent	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	22.7	271.9								

AREAS

	Gross Total ft²	Glass ft²	Glass (%)
Floor	6,528		
Part	254		
ExFlr	0		
Roof	0	0	0
Wall	4,736	1,532	32

HEATING COIL SELECTION

	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-130.7	4,717.6	54.2	79.1
Aux Htg	0.0	0	0	0
Preheat	-32.0	1,356	33	54
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-162.8			

stellar

USCS Lake City
Project #71003019
Stellar

		License #
Architect	Rex Smith	AR13370
Structural	Robert E. Killey	26941
Electrical	Mike Vranesh	43833
Mechanical	William Marcus Weaver	63146
Civil	Matt Lane	62978
Refrigeration	Ekle Small	56201

2900 Hartley Road
Jacksonville, FL 32257
Phone: 904.260.2900
stellar.net

stellar

2900 Hartley Road
Jacksonville, Florida 32257
Phone / Fax: 904-899-9467
www.stellar.net

LETTER OF TRANSMITTAL: 00061

Date: June 06, 2007

To: Joe Haltiwanger
Columbia County Building & Zoning
135 NE Hernando Avenue
Suite B-21
Lake City, FL 32055

Project: USCS-New Facility Lake City, FL
Location: Lake City, FL
Project No.: 21003019
Ref: CD and Drawings

Phone:
Fax:

WE ARE SENDING:

☐ Shop Drawings ☒ Plans ☐ Prints ☐ Specifications
☐ Letter ☐ Samples ☐ Change Order ☐ Other:

SUBMITTED FOR:

☐ Approval ☒ Your Use ☐ As Requested ☐ Review and Comment
☐ Due Date:

SENT VIA: FedEx

☒ Attached ☐ Separate Cover Via

COPIES	DATE	DESCRIPTION	PREPARED BY
1		Full Size Set of Signed and Sealed Architectural Drawings Only Per Drawing Revison #11 dated 05/31/07 (attached)	Stellar
1		CD Containing a Full Set of Drawings Per Drawing Revison #11 dated 05/31/07 (attached)	Stellar

Remarks:

WAJ/lmf

CC:

Signed: _____
Aubrey Johnson
Director of Warranty Services

THE STELLAR GROUP
2900 HARTLEY ROAD
JACKSONVILLE, FLORIDA 32257
(904) 260-2900

DESIGN DEPARTMENT
MEMORANDUM

DATE: May 31, 2007

TO: Distribution

FROM: Joe Bove

SUBJECT: United States Cold Storage
New Facility
Lake City, Florida
Job #71003019
Drawing Revision #11

Below is a list of current project documents. Documents which have been added or revised to reflect the latest project requirements are highlighted.

DWG #	TITLE	REV	DATE	DESCRIPTION
***G001**	***Cover Sheet***	***0***	***05/29/07***	***Construction Issue***
***G002**	***Overall Life Safety Plan***	***0***	***05/29/07***	***Construction Issue***
***G003**	***Admin. Welfare, Maintenance & Machine Room Life Safety Plans***	***0***	***05/29/07***	***Construction Issue***
C100	Cover Sheet	1	04/18/07	Construction Issue
***C101**	***Site Geometry Plan***	***1***	***05/29/07***	***Revised As Noted***
C101a	Site Master Plan	A	03/06/07	Permitting Issue
***C102**	***Site Utilities Plan***	***2***	***05/29/07***	***Revised As Noted***
***C103**	***Grading and Drainage Plan***	***1***	***05/29/07***	***Revised As Noted***
C104	Erosion and Sediment Control Plan	0	04/18/07	Construction Issue
C107	Landscaping Plan	0	04/18/07	Construction Issue
C501	Site Details	1	05/25/07	Revised Utility Permit Issue
C502	Site Details	1	05/25/07	Revised Utility Permit Issue
***C503**	***Site Details***	***0***	***05/29/07***	***Construction Issue***
***A100**	***Overall Floor Plan***	***0***	***05/29/07***	***Construction Issue***
***A101**	***Enlarged Floor Plan***	***0***	***05/29/07***	***Construction Issue***
***A101A**	***Enlarged Overall Rack Layout***	***0***	***05/29/07***	***Construction Issue***
***A102**	***Enlarged Floor Plan***	***0***	***05/29/07***	***Construction Issue***
***A103**	***Enlarged Floor Plan***	***0***	***05/29/07***	***Construction Issue***
***A104**	***Admin. Office & Welfare Reflected Ceiling Plan***	***0***	***05/29/07***	***Construction Issue***
***A105**	***Reflected Ceiling Plan***	***0***	***05/29/07***	***Construction Issue***
***A106**	***Roof Plan***	***0***	***05/29/07***	***Construction Issue***
***A200**	***Exterior Elevations***	***0***	***05/29/07***	***Construction Issue***
***A201**	***Enlarged Exterior Elevations***	***0***	***05/29/07***	***Construction Issue***
***A300**	***Wall Sections***	***0***	***05/29/07***	***Construction Issue***
***A301**	***Wall Sections***	***0***	***05/29/07***	***Construction Issue***
***A302**	***Wall Sections***	***0***	***05/29/07***	***Construction Issue***

*A303	Wall Sections	0	05/29/07	Construction Issue
*A304	Wall Sections	0	05/29/07	Construction Issue
*A305	Wall Sections	0	05/29/07	Construction Issue
*A306	Wall Sections	0	05/29/07	Construction Issue
*A307	Wall Sections	0	05/29/07	Construction Issue
*A401	Enlarged Stair Plans, Sections, & Details	0	05/29/07	Construction Issue
*A401a	Enlarged Stair Plans, Sections, & Details	0	05/29/07	Construction Issue
*A401b	Enlarged Stair Plans, Sections, & Details	0	05/29/07	Construction Issue
*A401c	Enlarged Stair Plans, Sections, & Details	0	05/29/07	Construction Issue
*A401d	Enlarged Stair Plans, Sections, & Details	0	05/29/07	Construction Issue
*A401e	Enlarged Stair Plans, Sections, & Details	0	05/29/07	Construction Issue
*A401f	Enlarged Stair Plans, Sections, & Details	0	05/29/07	Construction Issue
*A401g	Enlarged Ramp Plans, Sections, & Details	0	05/29/07	Construction Issue
*A401h	Enlarged Ramp Plans, Sections, Details, Floor Plans & Elevations	0	05/29/07	Construction Issue
*A401j	Elevator Plan & Misc. Details	0	05/29/07	Construction Issue
*A402	Enlarged Toilet Plan & Interior Elevations	0	05/29/07	Construction Issue
*A403	Enlarged Toilet Interior Elevations	0	05/29/07	Construction Issue
*A405	Enlarged Interior Elevations	0	05/29/07	Construction Issue
*A406	ADA Standard Details	0	05/29/07	Construction Issue
*A407	Dock Enlarged Plans	0	05/29/07	Construction Issue
*A408	Enlarged Plans, Sections, & Elevations	0	05/29/07	Construction Issue
*A501	Roof Detail	0	05/29/07	Construction Issue
*A601	Door Hardware & Schedule & Door Types	0	05/29/07	Construction Issue
*A602	Room Finish Schedule & Window Types	0	05/29/07	Construction Issue
*A603	Window Details	0	05/29/07	Construction Issue
*A604	Door Details	0	05/29/07	Construction Issue
*A605	Door Details	0	05/29/07	Construction Issue
*S000	Structural Design Notes and Typical Details	0	05/29/07	Construction Issue
*S100	Freezer Foundation Plan	0	05/29/07	Construction Issue
*S101	Foundation Plan	0	05/29/07	Construction Issue
*S102	Foundation Plans	0	05/29/07	Construction Issue
S103	Freezer Concrete Slab Plan	A	04/27/07	Owner Review
S104	Welfare Area and Partial Dock Concrete Slab Plan	A	04/27/07	Owner Review
S105	Maintenance Area and Partial Dock Concrete Slab Plan	A	04/27/07	Owner Review
*S106	Roof Framing Plans	0	05/29/07	Construction Issue
*S107	Pump Room Foundation & Framing Plans	0	05/29/07	Construction Issue
*S108	Deck Attachment	0	05/29/07	Construction Issue
*S109	Garage Slab and Foundation Plan	0	05/29/07	Construction Issue

*S110	Garage Roof Framing Plan	0	05/29/07	Construction Issue
*S111	Joist and Girder Loading Tables	0	05/29/07	Construction Issue
*S200	Structural Elevations	0	05/29/07	Construction Issue
*S201	Structural Elevations	0	05/29/07	Construction Issue
*S205	Tilt-Up Panel Elevations and Reinforcing	0	05/29/07	Construction Issue
*S206	Tilt-Up Panel Elevations and Reinforcing	0	05/29/07	Construction Issue
*S215	Tilt-Up panel Embeds	0	05/29/07	Construction Issue
*S216	Tilt-Up panel Embeds	0	05/29/07	Construction Issue
*S400	Freezer In Floor Stair Plan & Details	0	05/29/07	Construction Issue
*S401	Freezer In Floor Stair Plan & Details	0	05/29/07	Construction Issue
*S500	Foundation Sections and Details	0	05/29/07	Construction Issue
*S501	Foundation Sections and Details	0	05/29/07	Construction Issue
*S502	Framing Sections and Details	0	05/29/07	Construction Issue
*S503	Framing Sections and Details	0	05/29/07	Construction Issue
*S505	Sections and Details	0	05/29/07	Construction Issue
*S506	Framing Sections and Details	0	05/29/07	Construction Issue
*S507	Framing Sections and Details	0	05/29/07	Construction Issue
*S508	Framing Sections and Details	0	05/29/07	Construction Issue
*S509	Framing Sections and Details	0	05/29/07	Construction Issue
*S510	Framing Sections and Details	0	05/29/07	Construction Issue
*S515	Bracing Sections and Details	0	05/29/07	Construction Issue
*S520	Tilt-Up Panel Sections and Details	0	05/29/07	Construction Issue
*S600	Joist and Joist Girder Load Tables	0	05/29/07	Construction Issue
*S601	Roof Deck Attachment Diagram	0	05/29/07	Construction Issue
*S602	Roof Joist Uplift Diagram	0	05/29/07	Construction Issue
*M001	Mechanical Legend and Schedules	0	05/29/07	Construction Issue
*M002	Mechanical Specs	0	05/29/07	Construction Issue
*M101	Overall Mechanical First Floor Plan	0	05/29/07	Construction Issue
*M102	Mechanical Second Floor Plan	0	05/29/07	Construction Issue
*M103	Overall Mechanical Roof Plan	0	05/29/07	Construction Issue
*M401	Enlarged Mechanical Floor Plan	0	05/29/07	Construction Issue
*M402	Enlarged Mechanical Floor Plans	0	05/29/07	Construction Issue
*M501	Mechanical Details	0	05/29/07	Construction Issue
*M502	Mechanical Details	0	05/29/07	Construction Issue
*P001	Schedules, Notes, & Specs	0	05/29/07	Construction Issue
*P002	Schedules, Notes, & Specs	0	05/29/07	Construction Issue
*P003	Pipe Scope & Specifications	0	05/29/07	Construction Issue
*P100	Overall Floor Plan	0	05/29/07	Construction Issue
*P101	Enlarged Sanitary & Process Piping Floor Plan	0	05/29/07	Construction Issue
*P102	Enlarged Sanitary & Process Piping Floor Plan	0	05/29/07	Construction Issue
*P401	Enlarged Sanitary & Utility Floor Plan	0	05/29/07	Construction Issue
*P402	Enlarged Sanitary & Utility Floor Plan	0	05/29/07	Construction Issue
*P501	Detail Sheet	0	05/29/07	Construction Issue
*P502	Detail Sheet	0	05/29/07	Construction Issue

***E001**	***Legend Notes and Fixture Schedule**	***0**	***05/29/07**	***Construction Issue**
***E002**	***Electrical Site Plan**	***0**	***05/29/07**	***Construction Issue**
***E101**	***Lighting Plan Warehouse and Dock**	***0**	***05/29/07**	***Construction Issue**
***E102**	***Lighting Plan Office and Mechanical**	***0**	***05/29/07**	***Construction Issue**
***E103**	***Lighting Plan Machine, Maintenance Penthouses & Mezzanine North**	***0**	***05/29/07**	***Construction Issue**
***E201**	***Power Plan Warehouse and Dock**	***0**	***05/29/07**	***Construction Issue**
***E202**	***Power Plan Office and Mechanical**	***0**	***05/29/07**	***Construction Issue**
***E203**	***Power Plan Machine, Roof Maintenance Penthouses & Mezzanine North**	***0**	***05/29/07**	***Construction Issue**
***E204**	***Roof Plans Office, Machine & Maintenance**	***0**	***05/29/07**	***Construction Issue**
***E205**	***Electrical Grounding Lightning Protection Plan**	***0**	***05/29/07**	***Construction Issue**
E301	Refrig. Controls Plan Warehouse and Docks	B	10/30/06	Revised Pricing Documents
E302	Refrig. Controls Plan Machine Room	B	10/30/06	Revised Pricing Documents
E303	Refrig. Controls Plan Warehouse and Docks	A	10/30/06	Revised Pricing Documents
E304	Refrig. Controls Plan Warehouse and Docks	A	10/30/06	Revised Pricing Documents
***E501**	***Electrical Details**	***0**	***05/29/07**	***Construction Issue**
***E502**	***Electrical Details**	***0**	***05/29/07**	***Construction Issue**
***E503**	***Electrical Details**	***0**	***05/29/07**	***Construction Issue**
***E601**	***One Line Diagram**	***0**	***05/29/07**	***Construction Issue**
***E602**	***Refrigeration MCP Diagram**	***0**	***05/29/07**	***Construction Issue**
***E603**	***Panel Schedules**	***0**	***05/29/07**	***Construction Issue**
***E604**	***Panel Schedules**	***0**	***05/29/07**	***Construction Issue**
R103A	Refrigeration Underfloor Warming Layout	A	05/16/07	Permit Issue

Specifications:

***01000**	***05/30/07**	***Issue #1**	***General Requirements**
02200	05/10/07	Issue #1	Erosion and Sedimentation Control
02210	05/10/07	Issue #1	Site Clearing and Earthwork
02220	05/10/07	Issue #1	Excavation and Backfill
02560	05/10/07	Issue #1	Termite Protection
02700	05/10/07	Issue #1	Storm Drainage
02800	05/10/07	Issue #1	Asphalt Paving
02820	05/10/07	Issue #1	Concrete Paving
02830	05/10/0	Issue #1	Pads, Sidewalks, Curbs, and Ramps

02900	05/10/07	Issue #1	Fencing
02940	05/10/07	Issue #1	Landscaping
02950	05/10/07	Issue #1	Irrigation System
02960	05/10/07	Issue #1	On-Site Water Lines
02970	05/10/07	Issue #1	On-Site Sewer Lines
*03300	05/31/07	Issue #1	Cast-In-Place Concrete
*03400	05/31/07	Issue #1	Tilt-Up Concrete Panels
*03410	05/31/07	Issue #1	Concrete Insulation Systems
*04810	05/31/07	Issue #1	Unit Masonry Assemblies
*05420	05/31/07	Issue #1	Structural Steel
*05430	05/31/07	Issue #1	Open Web Joist
*05440	05/31/07	Issue #1	Joist Girders
*05500	05/31/07	Issue #1	Metal Fabrications
*05820	05/31/07	Issue #1	Metal Floor Deck
*05830	05/31/07	Issue #1	Metal Roof Deck
*06100	05/30/07	Issue #1	Rough Carpentry
*06600	05/30/07	Issue #1	Millwork
*06610	05/30/07	Issue #1	Laminate Cabinets
*07170	05/30/07	Issue #1	Single Ply Roofing System
*07200	05/30/07	Issue #1	Building Insulation
*07220	05/30/07	Issue #1	Roof Scuttle
*07710	05/30/07	Issue #1	Sealants
*07841	05/30/07	Issue #1	Through-Penetration Firestop Systems
*08110	05/30/07	Issue #1	Steel Doors and Frames
*08210	05/30/07	Issue #1	Wood Doors
*08510	05/30/07	Issue #1	Aluminum Entrance Doors, Aluminum Door Frames, Aluminum Fixed Glass Frames, Glass, & Glazing
*09260	05/30/07	Issue #1	Gypsum Board Assemblies

***09512**	***05/30/07**	***Issue #1**	***Acoustical Tile Ceilings***
***09900**	***05/31/07**	***Issue #1**	***Painting***
16010	04/11/07	Issue #1	Basic Electrical Requirements
16111	04/11/07	Issue #1	Conduit
16112	04/11/07	Issue #1	Surface Raceways
16120	04/11/07	Issue #1	Wire and Cable-600 volts
16130	04/11/07	Issue #1	Boxes
16141	04/11/07	Issue #1	Wiring Devices
16180	04/11/07	Issue #1	Equipment Installation & Wiring Systems
16190	04/11/07	Issue #1	Supporting Devices
16195	04/11/07	Issue #1	Electrical Identification
16420	04/11/07	Issue #1	Electrical Service Entrance
16425	04/11/07	Issue #1	Switchboards-600 volts and less
16440	04/11/07	Issue #1	Disconnect Switches
16442	04/11/07	Issue #1	Fuses
16445	04/11/07	Issue #1	Enclosed Circuit Breakers
16450	04/11/07	Issue #1	Grounding
16461	04/11/07	Issue #1	Dry Type Transformers
16470	04/11/07	Issue #1	Panelboards
16480	04/11/07	Issue #1	Motor Starters
16485	04/11/07	Issue #1	Contactors
16510	04/11/07	Issue #1	Lighting Fixtures
16623	05/16/07	Issue #1	Generator Quick Connect Switchboard
16740	04/11/07	Issue #1	Basic Electrical Requirements
16741	04/11/07	Issue #1	Telephone Service Entrance

Please call if you have any questions.

Cc: Project – 03019 Rachelle Glisson Kristen Lovell Cristi Whitham
Judd Chambers

Refrigeration
Air Conditioning

State Certified Air Conditioning
CAC1813296

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1800 OLEVIA ST JACKSONVILLE FL 32207
Email: dixieyork@bellsouth.net

PH 904-398-1585
FX 904-398-1587

October 17 2007

Columbia County – Building & Zoning
FAX 386-758-2160

Sub:j **PERMIT# 000026119**

General Contractor: Stellar Group Inc

Project: United States Cold Storage

We are the Mechanical/HVAC subcontractor for this project.

Following please find copy of State CAC license and QB license under which our company operates.

If anything further is needed, please call me.

Thank you

Rosemary Rellihan

TEMPORARY C.O. UNTIL
BUILDING IS COMPLETE
"OFFICE ONLY"

CERTIFICATE OF

OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code.

Parcel Number 36-3S-17-07463-004 **Building permit No.** 000026119

Use Classification COMM BLDG **Fire:** 0.00

Permit Holder STELLAR GROUP **Waste:**

Owner of Building UNITED COLD STORAGE **Total:** 0.00

Location: 211 NE MCCLOSKEY AVENUE

Date: 02/01/2008

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)

CERTIFICATE OF

OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code.

Parcel Number 36-3S-17-07463-004 **Building permit No.** 000026119

Use Classification COMM BLDG **Fire:** 920.00

Permit Holder STELLAR GROUP **Waste:**

Owner of Building UNITED COLD STORAGE **Total:** 920.00

Location: 211 NE MCCLOSKEY AVE, LAKE CITY, FL 32055

Date: 02/20/2008

Randy Jones by Ed Nelson

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)

Florida Energy Efficiency Code For Building Construction

Florida Department of Community Affairs

FLA/COM 2004 v2.5 -- Form 400A-2004

Method A: Whole Building Performance Method for Commercial Buildings

PROJECT SUMMARY

Short Desc:	New Prj	**Description:**	United States Cold Storage, I
Owner:	United States Cold Storage, INC		
Address1:	_	**City:**	Lake City
Address2:	_	**State:**	Florida
		Zip:	0
Type:	Warehouse	**Class:**	New Finished building
Jurisdiction:	LAKE CITY, COLUMBIA COUNTY, FL (221200)		
Cond Area:	9642 SF	**Cond & UnCond Area:**	9642 SF
No of Storeys:	1	**Area entered from Plans**	0 SF
Permit No:	0	**Max Tonnage**	23
		If different, write in:	_____

Compliance Summary

Component	Design	Criteria	Result
Gross Energy Use	9,845.6	11,797.7	**PASSES**
LIGHTING CONTROLS			**PASSES**
EXTERNAL LIGHTING			**None Entered**
HVAC SYSTEM			**PASSES**
PLANT			**None Entered**
WATER HEATING SYSTEMS			**PASSES**
PIPING SYSTEMS			**PASSES**
Met all required compliance from Check List?			**Yes/No/NA**

IMPORTANT NOTE: An input report of this design building must be submitted along with this Compliance Report.

CERTIFICATIONS

I hereby certify that the plans and specifications covered by this calculation are in compliance with the Florida Energy Code

Prepared By: _____ Building Official: _____

Date: 05/31/07 Date: _____

I certify that this building is in compliance with the FLorida Energy Efficiency Code

Owner Agent: _____ Date: _____

If Required by Florida law, I hereby certify (*) that the system design is in compliance with the FLorida Energy Efficiency Code

Architect:	Rex R Smith	Reg No: AR13370
Electrical Designer:	Michael T Vranesh, Jr.	Reg No: 43833
Lighting Designer:	Michael T Vranesh, Jr.	Reg No: 43833
Mechanical Designer:	William M Weaver	Reg No: 63146
Plumbing Designer:	William M Weaver	Reg No: 63146

(*) Signature is required where Florida Law requires design to be performed by registered design professionals. Typed names and registration numbers may be used where all relevant information is contained on signed/sealed plans.

Project: New Prj
Title: United States Cold Storage, INC
Type: Warehouse
(WEA File: JACKSONVILLE.TMY)

Building End Uses

	Design	Reference
Total	*83.79*	*100.00*
	$9,846	*$11,798*
ELECTRICITY(MBtu/kWh/$)	83.79	100.00
	193811	231328
	$9,846	*$11,798*
AREA LIGHTS	19.24	13.68
	44519	31658
	$2,262	*$1,615*
MISC EQUIPMT	5.27	5.27
	12198	12198
	$620	*$622*
PUMPS & MISC	0.05	0.05
	109	118
	$6	*$6*
SPACE COOL	41.13	50.84
	95142	117580
	$4,833	*$5,997*
VENT FANS	18.09	30.16
	41843	69774
	$2,126	*$3,558*

Credits & Penalties (if any): Modified Points: = 83.79 PASSES

External Lighting Compliance

Description	Category	Allowance (W/Unit)	Area or Length or No. of Units (Sqft or ft)	ELPA (W)	CLP (W)

None

Project: New Prj
Title: United States Cold Storage, INC
Type: Warehouse
(WEA File: JACKSONVILLE.TMY)

Lighting Controls Compliance

Acronym	Ashrae ID	Description	Area (sq.ft)	No. of Tasks	Design CP	Min CP	Compli-ance
Pr0Zo1Sp1	,002	Dressing/Locker/Fitting Room (General)	924	1	1	1	**PASSES**
Pr0Zo1Sp2	6	Toilet and Washroom	396	1	1	1	**PASSES**
Pr0Zo1Sp3	6	Toilet and Washroom	260	1	1	1	**PASSES**
Pr0Zo1Sp4	2	Storage & Warehouse - Inactive Storage	60	1	1	1	**PASSES**
Pr0Zo1Sp5	9	Food Service - Bar/Lounge	440	1	1	1	**PASSES**
Pr0Zo1Sp6	9	Food Service - Bar/Lounge	924	1	3	1	**PASSES**
Pr0Zo1Sp7	5	Corridor	98	1	1	1	**PASSES**
Pr0Zo2Sp1	16	Office - Open Plan	1,000	1	2	1	**PASSES**
Pr0Zo2Sp2	16	Office - Open Plan	345	1	2	1	**PASSES**
Pr0Zo2Sp3	17	Office - Enclosed	165	1	2	1	**PASSES**
Pr0Zo2Sp4	9	Food Service - Bar/Lounge	450	1	1	1	**PASSES**
Pr0Zo2Sp5	6	Toilet and Washroom	56	1	1	1	**PASSES**
Pr0Zo2Sp6	6	Toilet and Washroom	56	1	1	1	**PASSES**
Pr0Zo2Sp7	12	Lobby (General) - Reception and Waiting	741	1	1	1	**PASSES**
Pr0Zo2Sp8	6	Toilet and Washroom	150	1	1	1	**PASSES**
Pr0Zo2Sp9	6	Toilet and Washroom	140	1	1	1	**PASSES**
Pr0Zo2Sp10	5	Corridor	120	1	1	1	**PASSES**
Pr0Zo2Sp11	17	Office - Enclosed	288	1	2	1	**PASSES**
Pr0Zo2Sp12	17	Office - Enclosed	120	1	2	1	**PASSES**
Pr0Zo2Sp13	17	Office - Enclosed	120	1	2	1	**PASSES**
Pr0Zo2Sp14	17	Office - Enclosed	120	1	2	1	**PASSES**
Pr0Zo2Sp15	17	Office - Enclosed	84	1	1	1	**PASSES**
Pr0Zo2Sp16	15	Conference/meeting (Multiple Functions)	345	1	3	1	**PASSES**
Pr0Zo2Sp17	16	Office - Open Plan	2,240	1	6	1	**PASSES**

PASSES

Project: New Prj
Title: United States Cold Storage, INC
Type: Warehouse
(WEA File: JACKSONVILLE.TMY)

System Report Compliance

Pr0Sy1 **System 1 RTU-1** **Constant Volume Packaged System** **No. of Units 1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp-liance
Cooling System	Air Cooled 135000 to 240000 Btu/h Clg Capacity		14.70	9.70	15.80		PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume		0.71	0.90			PASSES

Pr0Sy2 **System 2 RTU-2** **Variable Air Volume Packaged System** **No. of Units 1**

Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp-liance
Cooling System	Air Cooled 240000 to 760000 Btu/h Cooling Capacity		10.30	9.50	10.90	9.70	PASSES
Air Handling System -Supply	Air Handler (Supply) - Variable Volume		0.69	1.27			PASSES

PASSES

Plant Compliance

Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category	Comp liance

None

Project: New Prj
Title: United States Cold Storage, INC
Type: Warehouse
(WEA File: JACKSONVILLE.TMY)

Water Heater Compliance

Description	Type	Category	Design Eff	Min Eff	Design Loss	Max Loss	Comp liance
EWH-1	Electric water heater	<= 12 [kW]	98.00	0.85			PASSES
EWH-2	Electric water heater	<= 12 [kW]	98.00	0.85			PASSES
EWH-3	Electric water heater	<= 12 [kW]	98.00	0.82			PASSES

PASSES

Project: New Prj
Title: United States Cold Storage, INC
Type: Warehouse
(WEA File: JACKSONVILLE.TMY)

Piping System Compliance

Category	Pipe Dia [inches]	Is Runout?	Operating Temp [F]	Ins Cond [Btu-in/hr .SF.F]	Ins Thick [in]	Req Ins Thick [in]	Compliance
Domestic and Service Hot Water Systems	1.00	False	120.00	0.30	1.00	0.55	PASSES

PASSES

Project: New Prj
Title: United States Cold Storage, INC
Type: Warehouse
(WEA File: JACKSONVILLE.TMY)

Other Required Compliance

Category	Section	Requirement (write N/A in box if not applicable)	Check
Infiltration	406.1	Infiltration Criteria have been met	☑
System	407.1	HVAC Load sizing has been performed	☑
Ventilation	409.1	Ventilation criteria have been met	☑
ADS	410.1	Duct sizing and Design have been performed	☑
T & B	410.1	Testing and Balancing will be performed	☑
Motors	414.1	Motor efficiency criteria have been met	☑
Lighting	415.1	Lighting criteria have been met	☑
O & M	102.1	Operation/maintenance manual will be provided to owner	☑
Roof/Ceil	404.1	R-19 for Roof Deck with supply plenums beneath it	☑
Report	101	Input Report Print-Out from EnergyGauge FlaCom attached?	☑

EnergyGauge Summit v3.10

INPUT DATA REPORT

Project Information

Project Name: New Prj
Project Title: United States Cold Storage, INC
Address:

State: Florida
Zip: 0

Owner: United States Cold Storage, INC

Orientation: North
Building Type: Warehouse
Building Classification: New Finished building

No.of Storeys: 1
GrossArea: 9642 SF

Zones

No	Acronym	Description	Type	Area [sf]	Multiplier	Total Area [sf]	
1	Pr0Zo1	Break Room	CONDITIONED	3102.0	1	3102.0	☐
2	Pr0Zo2	Zone 2	CONDITIONED	6540.0	1	6540.0	☐

Spaces

No	Acronym	Description	Type	Depth [ft]	Width [ft]	Height [ft]	Multiplier	Total Area [sf]	Total Volume [cf]	
In Zone: Pr0Zo1										
1	Pr0Zo1Sp1	Mens Locker 308	Dressing/Locker/Fitting Room (General)	21.00	44.00	9.00	1	924.0	8316.0	☐
2	Pr0Zo1Sp2	Mens Toilet 307	Toilet and Washroom	9.00	44.00	9.00	1	396.0	3564.0	☐
3	Pr0Zo1Sp3	Womens Toilet and Locker 306	Toilet and Washroom	10.00	26.00	9.00	1	260.0	2340.0	☐
4	Pr0Zo1Sp4	Janitor Closet 304	Storage & Warehouse - Inactive Storage	10.00	6.00	9.00	1	60.0	540.0	☐
5	Pr0Zo1Sp5	Vending Area 303	Food Service - Bar/Lounge	10.00	44.00	9.00	1	440.0	3960.0	☐
6	Pr0Zo1Sp6	Break Room 302	Food Service - Bar/Lounge	21.00	44.00	9.00	1	924.0	8316.0	☐
7	Pr0Zo1Sp7	Vestibule 301	Corridor	14.00	7.00	9.00	1	98.0	882.0	☐
In Zone: Pr0Zo2										
1	Pr0Zo2Sp1	Open Office 401	Office - Open Plan	20.00	50.00	9.00	1	1000.0	9000.0	☐
2	Pr0Zo2Sp2	Work Stations 403	Office - Open Plan	23.00	15.00	9.00	1	345.0	3105.0	☐
3	Pr0Zo2Sp3	Super Office 402	Office - Enclosed	11.00	15.00	9.00	1	165.0	1485.0	☐
4	Pr0Zo2Sp4	Drivers Lounge 404	Food Service - Bar/Lounge	15.00	30.00	9.00	1	450.0	4050.0	☐
5	Pr0Zo2Sp5	Womens 405	Toilet and Washroom	8.00	7.00	9.00	1	56.0	504.0	☐
6	Pr0Zo2Sp6	Mens 406	Toilet and Washroom	8.00	7.00	9.00	1	56.0	504.0	☐
7	Pr0Zo2Sp7	Lobby 501	Lobby (General) - Reception and Waiting	19.00	39.00	24.00	1	741.0	17784.0	☐
8	Pr0Zo2Sp8	Womens Toilet 512	Toilet and Washroom	15.00	10.00	9.00	1	150.0	1350.0	☐
9	Pr0Zo2Sp9	Mens Toilet 513	Toilet and Washroom	14.00	10.00	9.00	1	140.0	1260.0	☐
10	Pr0Zo2Sp10	Corr 511	Corridor	12.00	10.00	9.00	1	120.0	1080.0	☐
11	Pr0Zo2Sp11	Office 505	Office - Enclosed	24.00	12.00	9.00	1	288.0	2592.0	☐
12	Pr0Zo2Sp12	Office 506	Office - Enclosed	12.00	10.00	9.00	1	120.0	1080.0	☐
13	Pr0Zo2Sp13	Office 507	Office - Enclosed	12.00	10.00	9.00	1	120.0	1080.0	☐

14	Pr0Zo2Sp14	Office 508	Office - Enclosed	12.00	10.00	9.00	1	120.0	1080.0	☐
15	Pr0Zo2Sp15	Coffee Area 509	Office - Enclosed	7.00	12.00	9.00	1	84.0	756.0	☐
16	Pr0Zo2Sp16	Conference 510	Conference/meeting (Multiple Functions)	15.00	23.00	9.00	1	345.0	3105.0	☐
17	Pr0Zo2Sp17	General Office 503	Office - Open Plan	40.00	56.00	10.00	1	2240.0	22400.0	☐

Lighting

No	Type	Category	No. of Luminaires	Watts per Luminaire	Power [W]	Control Type	No.of Ctrl pts	
In Zone: Pr0Zo1								
In Space: Pr0Zo1Sp1								
1	Recessed Fluorescent - No vent	General Lighting	10	96	960	Manual On/Off	1	☐
In Space: Pr0Zo1Sp2								
1	Recessed Fluorescent - No vent	General Lighting	5	96	480	Manual On/Off	1	☐
In Space: Pr0Zo1Sp3								
1	Recessed Fluorescent - No vent	General Lighting	4	96	384	Manual On/Off	1	☐
In Space: Pr0Zo1Sp4								
1	Recessed Fluorescent - No vent	General Lighting	1	96	96	Manual On/Off	1	☐
In Space: Pr0Zo1Sp5								
1	Recessed Fluorescent - No vent	General Lighting	5	96	480	Manual On/Off	1	☐
In Space: Pr0Zo1Sp6								
1	Recessed Fluorescent - No vent	General Lighting	15	96	1440	Manual On/Off	3	☐
In Space: Pr0Zo1Sp7								
1	Recessed Fluorescent - No vent	General Lighting	1	96	96	Manual On/Off	1	☐
In Zone: Pr0Zo2								
In Space: Pr0Zo2Sp1								
1	Recessed Fluorescent - No vent	General Lighting	18	96	1728	Manual On/Off	2	☐
In Space: Pr0Zo2Sp2								

	1	Recessed Fluorescent - No vent	General Lighting	6	96	576	Manual On/Off	2	☐
In Space:	**Pr0Zo2Sp3**								
	1	Recessed Fluorescent - No vent	General Lighting	2	96	192	Manual On/Off	2	☐
In Space:	**Pr0Zo2Sp4**								
	1	Recessed Fluorescent - No vent	General Lighting	7	96	672	Manual On/Off	1	☐
In Space:	**Pr0Zo2Sp5**								
	1	Recessed Fluorescent - No vent	General Lighting	1	96	96	Manual On/Off	1	☐
In Space:	**Pr0Zo2Sp6**								
	1	Recessed Fluorescent - No vent	General Lighting	1	96	96	Manual On/Off	1	☐
In Space:	**Pr0Zo2Sp7**								
	1	Compact Fluorescent	General Lighting	22	48	1056	Manual On/Off	1	☐
In Space:	**Pr0Zo2Sp8**								
	1	Recessed Fluorescent - No vent	General Lighting	3	96	288	Manual On/Off	1	☐
In Space:	**Pr0Zo2Sp9**								
	1	Recessed Fluorescent - No vent	General Lighting	3	96	288	Manual On/Off	1	☐
In Space:	**Pr0Zo2Sp10**								
	1	Recessed Fluorescent - No vent	General Lighting	3	96	288	Manual On/Off	1	☐
In Space:	**Pr0Zo2Sp11**								
	1	Recessed Fluorescent - No vent	General Lighting	3	96	288	Manual On/Off	2	☐
In Space:	**Pr0Zo2Sp12**								
	1	Recessed Fluorescent - No vent	General Lighting	2	96	192	Manual On/Off	2	☐
In Space:	**Pr0Zo2Sp13**								
	1	Recessed Fluorescent - No vent	General Lighting	2	96	192	Manual On/Off	2	☐
In Space:	**Pr0Zo2Sp14**								
	1	Recessed Fluorescent - No vent	General Lighting	2	96	192	Manual On/Off	2	☐
In Space:	**Pr0Zo2Sp15**								
	1	Recessed Fluorescent - No vent	General Lighting	2	96	192	Manual On/Off	1	☐
In Space:	**Pr0Zo2Sp16**								

1	Recessed Fluorescent - No vent	General Lighting	6	96	576	Manual On/Off	2	☐
2	Compact Fluorescent	General Lighting	6	69	414	Manual Continuous Dimming	1	☐
In Space: Pr0Zo2Sp17								
1	Recessed Fluorescent - No vent	General Lighting	14	96	1344	Manual On/Off	3	☐
2	Compact Fluorescent	General Lighting	28	69	1932	Manual On/Off	3	☐

Walls

No	Description	Type	Width [ft]	H (Effec) [ft]	Multiplier	Area [sf]	Direction	Conductance [Btu/hr. sf. F]	Heat Capacity [Btu/sf.F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
In Zone: Pr0Zo1												
1	North Wall	10.5" Thermomass Panel	16.00	22.00	1	352.0	North	0.0687	19.927	113.61	14.6	☐
2	West Wall	10.5" Thermomass Panel	78.00	22.00	1	1716.0	West	0.0687	19.927	113.61	14.6	☐
In Zone: Pr0Zo2												
1	North Wall	7.25" Tilt-Up Panel, R-13 Insul, Gyp Bd	15.00	28.00	1	420.0	North	0.0752	17.750	95.04	13.3	☐
2	West Wall	7.25" Tilt-Up Panel, R-13 Insul, Gyp Bd	87.00	28.00	1	2436.0	West	0.0752	17.750	95.04	13.3	☐
3	South Wall	7.25" Tilt-Up Panel, R-13 Insul, Gyp Bd	98.00	28.00	1	2744.0	South	0.0752	17.750	95.04	13.3	☐
4	Pr0Zo2Wa4	7.25" Tilt-Up Panel, R-13 Insul, Gyp Bd	70.00	28.00	1	1960.0	East	0.0752	17.750	95.04	13.3	☐

Windows

No	Description	Type	Shaded	U [Btu/hr sf F]	SHGC	Vis.Tra	W [ft]	H (Effec) [ft]	Multiplier	Total Area [sf]	
In Zone: Pr0Zo1											
In Wall: Pr0Zo1Wa2											
1	Pr0Zo1Wa2Wi1	User Defined	No	0.5700	0.45	0.40	8.00	5.00	2	80.0	☐

In Zone: Pr0Zo2											
In Wall: Pr0Zo2Wa1											
1	Pr0Zo2Wa1Wi1	User Defined	No	0.5700	0.45	0.40	9.50	10.00	2	190.0	☐
2	Pr0Zo2Wa1Wi2	User Defined	No	0.5700	0.45	0.40	3.50	24.00	1	84.0	☐
In Wall: Pr0Zo2Wa2											
1	Pr0Zo2Wa2Wi1	User Defined	No	0.5700	0.45	0.40	7.50	10.00	4	300.0	☐
2	Pr0Zo2Wa2Wi2	User Defined	No	0.5700	0.45	0.40	10.00	24.00	1	240.0	☐
3	Pr0Zo2Wa2Wi3	User Defined	No	0.5700	0.45	0.40	8.00	5.00	4	160.0	☐
In Wall: Pr0Zo2Wa3											
1	Pr0Zo2Wa3Wi1	User Defined	No	0.5700	0.45	0.40	8.00	5.00	12	480.0	☐
In Wall: Pr0Zo2Wa4											
1	Pr0Zo2Wa4Wi1	User Defined	No	0.5700	0.45	0.40	8.00	5.00	4	160.0	☐

Doors

No	Description	Type	Shaded?	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/hr. sf. F]	Dens. [lb/cf]	Heat Cap. [Btu/sf. F]	R-Value [h.sf.F/Btu]	
In Zone: Pr0Zo1												
In Wall: Pr0Zo1Wa1												
1	Pr0Zo1Wa1Dr1	Polystyrene core (18 ga steel) 1	No	3.00	7.00	1	21.0	0.4982	0.00	0.00	2.01	☐
In Wall: Pr0Zo1Wa2												
1	Pr0Zo1Wa2Dr1	Polystyrene core (18 ga steel) 1	No	3.00	7.00	1	21.0	0.4982	0.00	0.00	2.01	☐
In Zone: Pr0Zo2												
In Wall: Pr0Zo2Wa1												
1	Pr0Zo2Wa1Dr1	Polystyrene core (18 ga steel) 1	No	3.00	7.00	1	21.0	0.4982	0.00	0.00	2.01	☐
In Wall: Pr0Zo2Wa4												
1	Pr0Zo2Wa4Dr1	Polystyrene core (18 ga steel) 1	No	3.00	7.00	2	21.0	0.4982	0.00	0.00	2.01	☐

Roofs

No	Description	Type	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Tilt [deg]	Cond. [Btu/hr. Sf. F]	Heat Cap [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]
In Zone: Pr0Zo1											

1	Pr0Zo1Rf1	Metal Deck, R-20 Insul, Membrane	44.00	78.00	1	3432.0	0.00	0.0494	0.38	10.88	20.3	☐

Skylights

No	Description	Type	U [Btu/hr sf F]	SHGC	Vis.Trans	W [ft]	H (Effec) [ft]	Multiplier	Area [Sf]	Total Area [Sf]	
In Zone:											
In Roof:											☐

Floors

No	Description	Type	Width [ft]	H (Effec) [ft]	Multiplier	Area [sf]	Cond. [Btu/hr. sf. F]	Heat Cap. [Btu/sf. F]	Dens. [lb/cf]	R-Value [h.sf.F/Btu]	
In Zone:	Pr0Zo1										
1	Pr0Zo1Fl1	6" Concrete Slab, Carpet and Pad	44.00	78.00	1	3432.0	0.5780	14.00	140.00	1.73	☐
In Zone:	Pr0Zo2										
1	Pr0Zo2Fl1	6" Concrete Slab, Carpet and Pad	81.00	90.00	1	7290.0	0.5780	14.00	140.00	1.73	☐

Systems

Pr0Sy1 **System 1 RTU-1** **Constant Volume Packaged System** **No. Of Units 1**

Component	Category	Capacity	Efficiency	IPLV	
1	Cooling System (Air Cooled 135000 to 240000 Btu/h Clg Capacity)	143800.00	14.70	15.80	☐
2	Air Handling System -Supply (Air Handler (Supply) - Constant Volume)	3165.00	0.71		☐

Pr0Sy2	System 2 RTU-2	Variable Air Volume Packaged System		No. Of Units 1

Component	Category	Capacity	Efficiency	IPLV	
1	Cooling System (Air Cooled 240000 to 760000 Btu/h Cooling Capacity)	275700.00	10.30	10.90	☐
2	Air Handling System -Supply (Air Handler (Supply) - Variable Volume)	8100.00	0.69		☐

Plant

Equipment	Category	Size	Inst.No	Eff.	IPLV	
						☐

Water Heaters

	W-Heater Description	Capacity	Cap.Unit	I/P Rt.	Efficiency		Loss		
1	Electric water heater	60	[Gal]	5 [kW]	98.0000	[Ef]		[Btu/h]	☐
2	Electric water heater	60	[Gal]	5 [kW]	98.0000	[Ef]		[Btu/h]	☐
3	Electric water heater	80	[Gal]	6 [kW]	98.0000	[Ef]		[Btu/h]	☐

Ext-Lighting

Description	Category	No. of Luminaires	Watts per Luminaire	Area/Len/No. of units [sf/ft/No]	Control Type	Wattage [W]	
							☐

Piping

No	Type	Operating Temperature [F]	Insulation Conductivity [Btu-in/h.sf.F]	Nomonal pipe Diameter [in]	Insulation Thickness [in]	Is Runout?	
1	Domestic and Service Hot Water Systems	120.00	0.30	1.00	1.00	No	☐

Fenestration Used

Name	Glass Type	No. of Panes	Glass Conductance [Btu/h.sf.F]	SHGC	VLT	
Tinted, Insulated Window	User Defined	2	0.5700	0.4500	0.4000	☐

Materials Used

Mat No	Acronym	Description	Only R-Value Used	RValue [h.sf.F/Btu]	Thickness [ft]	Conductivity [Btu/h.ft.F]	Density [lb/cf]	SpecificHeat [Btu/lb.F]	
1001	ApLbMat1001	7-1/4" Concrete	No	0.6040	0.6040	1.0000	140.00	0.2000	☐
1002	ApLbMat1002	2-1/2" Concrete	No	0.2083	0.2083	1.0000	140.00	0.2000	☐
1003	ApLbMat1003	6" Concrete	No	0.5000	0.5000	1.0000	140.00	0.2000	☐
1004	ApLbMat1004	3.33 in. Insulation	No	11.1080	0.2777	0.0250	5.70	0.2000	☐
1005	ApLbMat1005	GYP OR PLAS BOARD,5/8IN	No	0.5663	0.0521	0.0920	50.00	0.2000	☐
1006	ApLbMat1006	Inside surface resistance	Yes	0.6900					☐
1007	ApLbMat1007	Outside surface resistance	Yes	0.3300					☐
1008	ApLbMat1008	CARPET W/RUBBER PAD	Yes	1.2300					☐
1009	ApLbMat1009	PLASTIC FILM SEAL	Yes	0.0100					☐
1010	ApLbMat1010	POLYURETHANE, 3IN,	No	19.2308	0.2500	0.0130	1.50	0.3800	☐
1011	ApLbMat1011	Metal Deck	No	0.0002	0.0050	26.0000	480.00	0.1000	☐
1012	ApLbMat1012	POLYURETHANE, EXP., 2IN,	No	12.8231	0.1667	0.0130	1.50	0.3800	☐

Constructs Used

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]

1033	Polystyrene core (18 ga steel) 1		No	Yes	0.50			2.0	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	284	Polystyrene core (18 ga steel) 1		0.000	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1060	Metal Deck, R-20 Insul, Membrane	No	No	0.05	0.38	10.88	20.3	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	1007	Outside surface resistance		0.000	☐
2	1009	PLASTIC FILM SEAL		0.000	☐
3	1010	POLYURETHANE, 3IN,	0.2500	0.000	☐
4	1011	Metal Deck	0.0050	0.000	☐
5	1006	Inside surface resistance		0.000	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1061	10.5" Thermomass Panel	No	No	0.07	19.93	113.61	14.6	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	1007	Outside surface resistance		0.000	☐
2	1002	2-1/2" Concrete	0.2083	0.000	☐
3	1012	POLYURETHANE, EXP., 2IN,	0.1667	0.000	☐
4	1003	6" Concrete	0.5000	0.000	☐
5	1006	Inside surface resistance		0.000	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1062	7.25" Tilt-Up Panel, R-13 Insul, Gyp Bd	No	No	0.08	17.75	95.04	13.3	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	1007	Outside surface resistance		0.000	☐
2	1001	7-1/4" Concrete	0.6040	0.000	☐
3	1004	3.33 in. Insulation	0.2777	0.000	☐
4	1005	GYP OR PLAS BOARD,5/8IN	0.0521	0.000	☐
5	1006	Inside surface resistance		0.000	☐

No	Name	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Capacity [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Btu]	
1063	6" Concrete Slab, Carpet and Pad	No	No	0.58	14.00	140.00	1.7	☐

Layer	Material No.	Material	Thickness [ft]	Framing Factor	
1	1003	6" Concrete	0.5000	0.000	☐
2	1008	CARPET W/RUBBER PAD		0.000	☐

System Checksums

By TSG

CV System — **Single Zone**

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 6 / 16
Outside Air: OADB/WB/HR: 92 / 77 / 116

	Space Sens. + Lat. Btu/h	Plenum Sens. + Lat Btu/h	Net Total Btu/h	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0	0	0	0
Skylite Cond	0	0	0	0
Roof Cond	0	10,458	10,458	6
Glass Solar	8,484	0	8,484	5
Glass Cond	635	0	635	0
Wall Cond	825	134	959	1
Partition	-2,012		-2,012	-1
Exposed Floor	0		0	0
Infiltration	0		0	0
Sub Total ==>	7,932	10,592	18,524	11
Internal Loads				
Lights	16,617	4,154	20,772	13
People	18,500		18,500	11
Misc	12,362	0	12,362	8
Sub Total ==>	47,479	4,154	51,633	32
Ceiling Load	14,559	-14,559	0	0
Ventilation Load	0	0	82,330	50
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	8,764		8,764	5
Exhaust Heat		0	0	0
Sup. Fan Heat			1,876	1
Ret. Fan Heat		0	0	0
Duct Heat Pkup		0	0	0
Reheat at Design			0	0
Grand Total ==>	78,735	187	163,128	100.00

CLG SPACE PEAK

Mo/Hr: Sum of OADB: Peaks

	Space Sensible Btu/h	Percent Of Total (%)
Skylite Solar	0	0
Skylite Cond	0	0
Roof Cond	0	0
Glass Solar	9,283	13
Glass Cond	585	1
Wall Cond	856	1
Partition	-2,012	-3
Exposed Floor	0	0
Infiltration	0	0
Sub Total ==>	8,712	12
Lights	16,617	24
People	9,250	13
Misc	12,362	18
Sub Total ==>	38,229	54
	14,702	21
	0	0
	8,764	12
Grand Total ==>	70,408	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 33

	Space Peak Space Sens Btu/h	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0	0	0.00
Skylite Cond	0	0	0.00
Roof Cond	0	-4,718	6.00
Glass Solar	0	0	0.00
Glass Cond	-1,564	-1,564	1.99
Wall Cond	-1,629	-2,497	3.18
Partition	-1,878	-1,878	2.39
Exposed Floor	0	0	0.00
Infiltration	0	0	0.00
Sub Total ==>	-5,071	-10,657	13.56
Internal Loads			
Lights	0	0	0.00
People	0	0	0.00
Misc	0	0	0.00
Sub Total ==>	0	0	0.00
Ceiling Load	-5,586	0	0.00
Ventilation Load	0	-67,928	86.44
Ov/Undr Sizing	0	0	0.00
Exhaust Heat		0	0.00
OA Preheat Diff.		0	0.00
RA Preheat Diff.		0	0.00
Additional Reheat		0	0.00
Grand Total ==>	-10,657	-78,585	100.00

TEMPERATURES

	Cooling	Heating
SADB	55.0	75.0
Plenum	90.1	66.2
Return	75.0	72.0
Ret/OA	83.2	52.7
Fn MtrTD	0.1	0.0
Fn BldTD	0.1	0.0
Fn Frict	0.4	0.0

AIRFLOWS

	Cooling	Heating
Vent	1,563	1,563
Infil	0	0
Supply	3,165	3,165
MinStop/Rh	0	0
Return	3,165	3,165
Exhaust	1,563	1,563
Rm Exh	0	0
Auxiliary	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	49.4	49.4
cfm/ft²	1.04	1.04
cfm/ton	232.83	
ft²/ton	223.85	
Btu/hr·ft²	53.61	-25.82
No. People	82	

COOLING COIL SELECTION

	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter HR gr/lb	Leave DB °F	Leave WB °F	Leave HR gr/lb
Main Clg	13.6	163.1	100.3	3,165.0	83.2	69.3	85.6	54.5	53.1	58.1
Aux Clg	0.0	0.0	0.0	0	0	0	0	0	0	0
Opt Vent	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	13.6	163.1								

AREAS

	Gross Total	Glass ft²	Glass (%)
Floor	3,043		
Part	655		
ExFlr	0		
Roof	3,043	0	0
Wall	1,110	80	7

HEATING COIL SELECTION

	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-78.6	3,165.0	52.7	75.0
Aux Htg	0.0	0	0	0
Preheat	-6.1	3,165	53	54
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-78.6			

System Checksums

By TSG

VAV System

Variable Volume Reheat (30% Min Flow Default)

COOLING COIL PEAK

Peaked at Time: Mo/Hr: 8 / 17
Outside Air: OADB/WB/HR: 87 / 76 / 120

	Space Sens. + Lat. Btu/h	Plenum Sens. + Lat Btu/h	Net Total Btu/h	Percent Of Total (%)
Envelope Loads				
Skylite Solar	0	0	0	0
Skylite Cond	0	0	0	0
Roof Cond	0	0	0	0
Glass Solar	71,485	0	71,485	26
Glass Cond	8,979	0	8,979	3
Wall Cond	3,237	1,963	5,201	2
Partition	-583		-583	0
Exposed Floor	0		0	0
Infiltration	0		0	0
Sub Total ==>	83,118	1,963	85,082	31
Internal Loads				
Lights	35,648	8,912	44,560	16
People	24,500		24,500	9
Misc	30,512	0	30,512	11
Sub Total ==>	90,660	8,912	99,572	37
Ceiling Load	1,601	-1,601	0	0
Ventilation Load	0	0	78,801	29
Dehumid. Ov Sizing			0	0
Ov/Undr Sizing	3,305		3,305	1
Exhaust Heat		-1,533	-1,533	-1
Sup. Fan Heat			6,638	2
Ret. Fan Heat		0	0	0
Duct Heat Pkup		0	0	0
Reheat at Design			0	0
Grand Total ==>	178,685	7,741	271,866	100.00

CLG SPACE PEAK

Mo/Hr: 10 / 17
OADB: 81

	Space Sensible Btu/h	Percent Of Total (%)
Envelope Loads		
Skylite Solar	0	0
Skylite Cond	0	0
Roof Cond	0	0
Glass Solar	91,710	51
Glass Cond	4,123	2
Wall Cond	2,318	1
Partition	-583	0
Exposed Floor	0	0
Infiltration	0	0
Sub Total ==>	97,569	54
Internal Loads		
Lights	35,648	20
People	12,250	7
Misc	30,512	17
Sub Total ==>	78,410	43
Ceiling Load	1,468	1
Ventilation Load	0	0
Ov/Undr Sizing		
Exhaust Heat	3,631	2
OA Preheat Diff.		
RA Preheat Diff.		
Additional Reheat		
Grand Total ==>	181,078	100.00

HEATING COIL PEAK

Mo/Hr: Heating Design
OADB: 33

	Space Peak Space Sens Btu/h	Coil Peak Tot Sens Btu/h	Percent Of Total (%)
Envelope Loads			
Skylite Solar	0	0	0.00
Skylite Cond	0	0	0.00
Roof Cond	0	0	0.00
Glass Solar	0	0	0.00
Glass Cond	-29,942	-29,942	18.40
Wall Cond	-6,127	-8,226	5.05
Partition	-533	-533	0.33
Exposed Floor	0	0	0.00
Infiltration	0	0	0.00
Sub Total ==>	-36,603	-38,701	23.78
Internal Loads			
Lights	0	0	0.00
People	0	0	0.00
Misc	0	0	0.00
Sub Total ==>	0	0	0.00
Ceiling Load	-537	0	0.00
Ventilation Load	0	-58,942	36.22
Ov/Undr Sizing	0	0	0.00
Exhaust Heat		447	-0.27
OA Preheat Diff.		0	0.00
RA Preheat Diff.		-65,557	40.28
Additional Reheat		0	0.00
Grand Total ==>	-37,140	-162,753	100.00

TEMPERATURES

	Cooling	Heating
SADB	55.0	79.1
Plenum	75.9	71.7
Return	76.0	71.8
Ret/OA	78.1	60.6
Fn MtrTD	0.1	0.0
Fn BldTD	0.2	0.0
Fn Frict	0.5	0.0

AIRFLOWS

	Cooling	Heating
Vent	1,356	1,356
Infil	0	0
Supply	8,125	4,718
MinStop/Rh	4,718	4,718
Return	8,125	4,718
Exhaust	1,356	1,356
Rm Exh	0	0
Auxiliary	0	0

ENGINEERING CKS

	Cooling	Heating
% OA	16.7	28.7
cfm/ft²	1.24	0.72
cfm/ton	358.62	
ft²/ton	288.14	
Btu/hr·ft²	41.65	-24.93
No. People	49	

COOLING COIL SELECTION

	Total Capacity ton	Total Capacity MBh	Sens Cap. MBh	Coil Airflow cfm	Enter DB °F	Enter WB °F	Enter gr/lb	Leave DB °F	Leave WB °F	Leave gr/lb
Main Clg	22.7	271.9	199.3	7,467.8	78.1	64.2	67.7	54.2	51.9	53.8
Aux Clg	0.0	0.0	0.0	0	0	0	0	0	0	0
Opt Vent	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Total	22.7	271.9								

AREAS

	Gross Total	Glass ft²	Glass (%)
Floor	6,528		
Part	254		
ExFlr	0		
Roof	0	0	0
Wall	4,736	1,532	32

HEATING COIL SELECTION

	Capacity MBh	Coil Airflow cfm	Ent °F	Lvg °F
Main Htg	-130.7	4,717.6	54.2	79.1
Aux Htg	0.0	0	0	0
Preheat	-32.0	1,356	33	54
Humidif	0.0	0	0.0	0.0
Opt Vent	0.0	0	0.0	0.0
Total	-162.8			