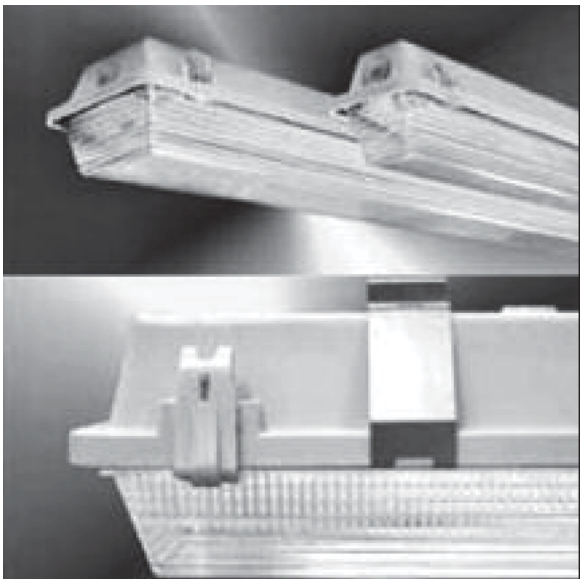
BioCold® Environmental, Inc.

APPLICATIONS

- Versatile moisture, vapor and dust-proof enclosed luminaire
- An excellent choice for food processing areas, cold storage areas and locations subject to the elements
- May be individually mounted or row mounted with a continuous feed



FINISH

- Prior to painting, all metal parts are treated with a multi-stage phosphate-bonding process to ensure adhesion and inhibit rusting
- All steel components are painted with a lighting grade baked white enamel, having a reflectance factor exceeding 87% for premium quality and durability

CONSTRUCTION

- High quality 48” enclosed luminaire specifically designed for long-term, element-prone installations
- Features rugged steel bodies enclosed in durable fiberglass, quality paint finishes and superior electrical components
- Housing is molded of one-piece impact-resistant fiberglass reinforced polyester; self-extinguishing, flame resistant and unaffected by many industrial chemicals
- A closed cell neoprene gasket is permanently bonded to the upper housing, forming a continuous tight seal with the diffuser
- Internal geartray is constructed of heavy gauge steel housing, all electrical components to provide proper grounding
- Ample knockouts are provided on back for convenient installation

DIFFUSER

- Lineal ribbed high-impact acrylic lens
- Eight (8) polycarbonate latches and 2 rubber end plugs
- Sleek diffuser design provides brilliant workspace and brings contemporary look to vaporproof fixtures.
-

LAMPS

- □□2-watt □ □ □ lamps
- Three (3) lamps per fixture
- □□□0 □□□ color
- □50,000 hour life
- □23 □□ lumens per lamp

ELECTRICAL

- Fulham Workhorse electronic ballast (120V/60hz)
- Max. Power: □ 6W
- Max Current: □ □6A
- Min. Operating Temp: -20°F (-30°C)
- UL Listed (File E68657)
- Suitable for wet locations
- IBEW union-made

INSTALLATION

- Innovative concealed mounting brackets save installation time and preserve seal.
- Stainless steel mounting brackets available.

BioCold Environmental Inc. • 160 Old State Road • Ellisville, MO 63021

Phone: 636-349-0300 • Fax: 636-349-0419• Email: biocold@aol.com

Solid State Lighting

T8 Clear

T8 Frosted

LED Linear T8 Series

Making the transition from fluorescent to LED commercial lamps? Choose Topaz and switch on the savings with our new LED Frosted Bypass and the ballast compatible Direct Tube series. Our glass construction LED tubes utilize an internal power supply and provide a 240 degree beam angle for improved light distribution with consistent, glare free coverage. With a life rating of up to 50,000 hours, retrofitting to the Topaz T8 series can realize energy savings of up to 44%; select models are DLC approved.

TOPAZ

Friendly Service... Powerful Solutions™

Solid State Lighting

LED Linear T8 Series

Features

- Lasts twice as long as standard fluorescent lamps
- 2', 3' and 4' lengths
- Available in color temperatures: 3500K–6500K
- Select models available with DLC certification
- Safe, easy replacement for T8 lamp & ballast systems
- -20°C to 45°C operating temperature range

Applications

- Office
- Retail
- Hospitality
- Warehouse

5-YEAR WARRANTY

RoHS COMPLIANT

Intertek

DLC QPL LISTED

Order info

Item #		Code	Watts	Volts	Base	CRI	CCT (Kelvin)	Initial Lumens	Beam Spread	Avg. Rated Life	MOL In.	DLC Approved
T8 Clear Ballast Bypass												
L2T8/35C/10/U/G4	NEW!	79764	10	100-277	G13	>80	3500	1,031	130°	50,000	24"	Y
L2T8/40C/10/U/G4	NEW!	79765	10	100-277	G14	>80	4000	1,059	130°	50,000	24"	Y
L2T8/50C/10/U/G4	NEW!	79766	10	100-277	G15	>80	5000	1,114	130°	50,000	24"	Y
L2T8/60C/10/U/G4	NEW!	79767	10	100-277	G16	>80	6200	1,174	130°	50,000	24"	Y
L3T8/35C/15/U/G4	NEW!	79759	15	100-277	G17	>80	3500	1,550	130°	50,000	36"	-
L3T8/40C/15/U/G4	NEW!	79760	15	100-277	G18	>80	4000	1,660	130°	50,000	36"	-
L3T8/50C/15/U/G4	NEW!	79761	15	100-277	G19	>80	5000	1,750	130°	50,000	36"	-
L3T8/60C/15/U/G4	NEW!	79762	15	100-277	G20	>80	6200	1,750	130°	50,000	36"	-
L4T8/35/20/U/G2		79240	20	100-277	G21	>80	3500	1,900	120°	35,000	48"	-
L4T8/40/20/U/G3		70657	20	100-277	G23	>80	4000	2,100	120°	50,000	48"	Y
L4T8/50/20/U/G3		70658	20	100-277	G25	>80	5000	2,100	120°	50,000	48"	Y
L4T8/35C/22/U/G4	NEW!	79727	22	100-277	G22	>80	3500	2,220	150°	50,000	48"	Y
L4T8/40C/22/U/G4	NEW!	79742	22	100-277	G24	>80	4000	2,300	150°	50,000	48"	Y
L4T8/50C/22/U/G4	NEW!	79743	22	100-277	G26	>80	5000	2,346	150°	50,000	48"	Y
L4T8/60C/22/U/G4	NEW!	79730	22	100-277	G27	>80	6200	2,450	150°	50,000	48"	-
T8 Frosted Ballast Bypass												
L2T8B/835/9/U/F	NEW!	77934	9	120-277	G13	>80	3500	1,000	240°	50,000	24"	Y
L2T8B/840/9/U/F		77941	9	120-277	G13	>80	4000	1,000	240°	50,000	24"	Y
L2T8B/850/9/U/F		77942	9	120-277	G13	>80	5000	1,000	240°	50,000	24"	Y
L2T8B/865/9/U/F	NEW!	77935	9	120-277	G13	>80	6500	1,000	240°	50,000	24"	-
L3T8B/835/12/U/F	NEW!	77985	12	120-277	G13	>80	3500	1,200	240°	50,000	36"	-
L3T8B/840/12/U/F	NEW!	77986	12	120-277	G13	>80	4000	1,200	240°	50,000	36"	-
L3T8B/850/12/U/F	NEW!	77987	12	120-277	G13	>80	5000	1,200	240°	50,000	36"	-
L3T8B/865/12/U/F	NEW!	77988	12	120-277	G13	>80	6500	1,200	240°	50,000	36"	-
L4T8B/835/18/U/F	NEW!	77943	18	120-277	G13	>80	3500	1,800	240°	50,000	48"	Y
L4T8B/840/18/U/F		77945	18	120-277	G13	>80	4000	1,800	240°	50,000	48"	Y
L4T8B/850/18/U/F		77946	18	120-277	G13	>80	5000	1,800	240°	50,000	48"	Y
L4T8B/865/18/U/F		77950	18	120-277	G13	>80	6500	1,800	240°	50,000	48"	-
Frosted Ballast Compatible												
L4T8E/835/18/U/F	NEW!	77949	18	120-277	G13	>80	3500	1,800	240°	50,000	48"	Y
L4T8E/840/18/U/F		77947	18	120-277	G13	>80	4000	1,800	240°	50,000	48"	Y
L4T8E/850/18/U/F		77948	18	120-277	G13	>80	5000	1,800	240°	50,000	48"	Y

Energy Savings Comparison

Item #	LED Watts	Fluorescent Tube	Fluorescent Wattage**	% Energy Savings
L2T8/XX/11/U/G2	11	17WT8	16	31%
L3T8/XX/15/U/G2	15	25WT8	23	35%
L4T8/XX/20/U/G2	20	32WT8	30	33%
L4T8/XX/20/U/G3	20	32WT8	30	33%
L4T8/XX/20/U/G2/F	20	32WT8	30	33%

** Estimated fluorescent system watts based on program start normal ballast factor

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Lamp may not be compatible with all dimmers. Visit www.topaz-usa.com for up-to-date dimmer compatibility information. FIVE (5) YEAR LIMITED WARRANTY: TOPAZ LIGHTING CORP. warrants to the original purchaser that all TOPAZ CXL LED lamps shall be free from defects of material and workmanship for a period of five (5) years from the date of purchase. TOPAZ LIGHTING CORP. will, at its option, repair or replace without charge a defective LED lamp that has not been misused, carelessly handled or improperly installed. Repair or replacement, as stated above, shall constitute the purchaser's exclusive warranty, which does not extend to transportation, installation, labor or any other consequential charges. www.topaz-usa.com This device is not intended for use with emergency exits. Specifications subject to change without notice.

Warning: TOPAZ linear LED lamps must not be installed on a shunted lampholder. The TOPAZ linear LED lamps require direct connection to the mains voltage. Follow the installation instructions for re-wiring of the luminaire.

TOPAZ
Friendly Service... Powerful Solutions™

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925 Waverly Avenue
Holtsville, NY 11742
800.666.2852 | Fax: 631.758.8026

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San Fernando, CA 91340
888.551.2852 | Fax: 888.690.2852

FL Office
2020 West 26th Street, Ste. C
Jacksonville, FL 32209
800.338.2852 | Fax: 772.778.5386

www.topaz-usa.com

BIOCOLD
ENVIRONMENTS FOR LIFE

EQUIPMENT AND MATERIAL LIST

WEBSTER INTERDISCIPLINARY SCIENCE BUILDING

ROOM #376 | CTR SECTION #130383 | WEBSTER, MO

EQUIPMENT AND MATERIAL COMPONENT LISTING

DESCRIPTION	PRODUCT
Insulated panel structure	Bally Refrigerated Boxes
24x14 view window	Norfab
Control Systems	7” Color Touchscreen
Temperature Controller	Allen Bradley
Lighting	BioCold 48” LED Fixtures
Compressor-Condensing Unit	Keeprite KEZA011H8-HT3B Outdoor Air-Cooled
Evaporator Unit Cooler	Larkin ACM156AE
Copper Tubing	Mueller Streamline Type L ACR
Brazing material	Harris Stay Silv 15
Solenoid valves	Sporlan Rapid Cycle Valves
Piping insulation	Armaflex

BioCold
Environments for Life

February 7, 2016

Paric Construction
Attn: Devin Gates
77 Westport Drive, Suite 250
Maryland Heights, Missouri 63146

RE: Submittal 130383-006 for the Controlled Temperature Room at Webster University Science Building

Dear Mr. Gates:

BioCold Environmental, Inc. is pleased to provide the following documents as our re-submittal package for the walk-in controlled temperature room at the Webster University Interdisciplinary Science Building in Webster, Missouri. This packet responds to each of the items identified in the review comments provided by Cannon Design.

COMMENTS:

1. **Comply with codes per specification 13083.1.3.A.**
   All equipment and installation methods will be in compliance with the relevant codes and regulatory requirements of ASHRAE, the Air Conditioning and Refrigeration Institute (ARI), the American Society for Testing and Materials (ASTM), the National Electrical Manufacturer's Association (NEMA), the National Sanitation Foundation's Standard #7 (NSF), and the Sealed Insulating Glass Manufacturer's Association. OK

2. **Provide Items 2, 3, 4 per Spec 1.4-A.**
   Please see enclosed for drawing more clearly indicating the following: (2) electrical schematic with j-box locations and conduit sizes; (3) refrigerant schematic showing lines and locations of system components, and (4) re-stated design and performance criteria. OK

3. **Provide equipment anchorage information per 1.4.B**
   Please see updated shop drawing showing equipment anchorage detail(s). OK

4. **Provide samples.**
   Samples have been previously provided. We have attempted to obtain custom samples per the specification requirements, but the manufacturer is not able to provide the specified wall/ceiling assembly samples. We have numerous installations in the St. Louis area, and would be pleased to provide either a site visit or photos of other installations. OK

5. **Provide warranty information.**
   Please see warranty letter included in the re-submittal package. OK

A/E: I will submit the sample received by bio-cold which under previous discussion with Kelvin does not meet requirements. Please let me know how to proceed. - Devin

6. **Provide ASTM E84 information per specification 130383.2.2.D.3.**
   Please see updated insulated panel data sheets indicating the ASTM E84 compliance. OK

7. **Coordinate installation and service clearance requirements with all other trades.**
   Clearance requirements will be coordinated during field measurements and throughout the installation process. OK

8. **The electrical drawings show a 20A/2pole (3wire) circuit for the evaporator serving the cold room. This shop drawing indicates a 20A/3pole (4wire) circuit to the control panel.**
   This has been coordinated with the electrical contractor. All control wiring from the control panel to equipment within the room is by BioCold. OK

9. **Coordinate with GC and electrical contractor.**
   We have already had coordination conversations with the GC and electrical contractor and will continue to coordinate throughout the installation process. OK

10. **GC to confirm dimensions work with the floor depression provided.**
    BioCold will also field verify all dimensions prior to fabrication.

11. **Relocate GFCI receptacles to 42” AFF.** Provide GCI receptacles at 42" AFF. Casework countertop is 34" high with 4" backsplash so there will no conflict.
    Please confirm desired receptacle height. The specification indicates that the receptacles should be 42” AFF **unless otherwise noted.** The elevation on A0615/14 clearly scales the receptacles at 48” AFF on center. We are more than willing to relocate the receptacles to 42” AFF on center, but want to confirm that this will not interfere with the casework/counters.

12. **GC to coordinate backing requirements for casework installation with casework manufacturer.**
    By others. GC to coordinate.

13. **GC to coordinate piping routes and condenser location on roof.**
    These routes and locations are being coordinated with the GC. OK

14. **Provide closure trim angles at walls & ceiling. Color to match cold room panels.**
    Closure trim in matching finish will be provided. Trim to be field measured prior to fabrication. OK

15. **Adjust partition wall in front of cold room as needed to accommodate touchscreen controller.**
    Please see revised shop drawing for requested clearances. OK

16. **Inside clear height to 8’-0” AFF.**
    The inside ceiling height will be 8’-10” AFF. With an evaporator that extends 9” from the ceiling, this leaves an inside clear height of 8’-1” AFF. OK

17. **Provide equipment seismic anchorage information per 1.4-B.**
    See item #3 above. OK

18. **Coordinate with GC & provide needed for connections to building automation system, smoke detector and sprinkler per specification 130383.2.6.C.**
    Wall and ceiling panels are adequate to support smoke detector without additional reinforcement required. The exact location for smoke detector can be field coordinated. Sprinkler lines are typically cored by the sprinkler contractor. BioCold does not recommend

GC will coordinate with FP contractor. -Devin Gates

OK

sleeved penetrations, as this creates additional possibility for moisture infiltration. BioCold is willing to make sprinkler penetrations if locations are marked by the sprinkler contractor. This will be coordinated in the field during installation. GC TO COORDINATE CONNECTION TO BUILDING AUTOMATION SYSTEM, IF NEEDED.

19. **Provide information per specification 130383 2.3.A.1 & 2 and 2.3.B.**
The performance information has been updated to include additional information as requested. OK

20. **Provide panel joint securing and sealing information per spec 2.2.D.2.**
See Bally Refrigerated Boxes product data sheets. All panels are constructed with cam lock fasteners and NSF-approved gaskets foamed in place. Flush-mounted caps are provided to close wrench holes. OK

21. **Provide foam-in-place isocyanurate insulation per specification 130383.2.2.D.2.a.**
Polyurethane (PUR) insulation is used by insulated panel manufacturers with cam-lock panel construction due to its high expansion rate (approx. 20:1) and insulation value. Continuous panel line manufacturers often use polyisocyanurate (PIR) insulation which has an expansion rate of approximately 5:1. This makes it acceptable for long panel sheets, but not for foaming around cam locks, conduits, j-boxes, etc. It also has a slightly lower R-value. Polyisocyanurate insulation is not available in cam-lock panel construction. OK

22. **Provide K-factor of 0.118 per specification 130383.2.2.D.2a.**
The K-factor of insulated panel construction varies under different temperature conditions. For cooler applications (mean temperature of 55°F), the insulated panels have an R-value of 28.8 for a 4" thick panel, which equates to a K-value of .139. Under freezer application conditions (mean temperature of 20°F), the K-value drops to .125, reflecting an R-value of 32.1. In either case, 4" thick insulated panels are no longer able to achieve the specified K-values due to changes in the blowing agents used to foam the panels, as mandated by the Montreal Protocol and subsequent environmental regulatory changes. This is consistent across panel manufacturers.

A/E: Confirm this is acceptable -DG

OK

23. **Provide ASTM E84 information per specification 130383.2.2.D.3.**
See item #6 above. OK

24. **Per spec 2.2.E.3 double gasketing on 3 sides of door and wiper gasket on bottom. Self-closing.**
We have been unable to locate a double-gasket for 3 sides of the door, unless we were to apply a surface-mounted gasket in addition to the magnetic gasket built into the door. There is a double sweep gasket at the bottom of the door.

A/E: Confirm this is acceptable -DG

PROVIDE SURFACE-MOUNTED GASKET IN ADDITION TO MAGNETIC GASKET. CALL TO DISCUSS IF THERE ARE ANY DISADVANTAGES.

25. **Provide manual defrost capabilities per spec 2.3.E.3.i.**

OK The controls offer both automatic and manual defrost capabilities.

26. **Provide NFPA 70 and UL508A compliance per spec 2.3.D.5.**
The control panel is in compliance with NFPA 70 and carries a UL508A certification and will be labeled as such. OK

27. **Per spec 2.4.B.7, max sound level in room of 65 dba exclusive of occupancy generated noise.**
Sound characteristics vary based on room configuration, and sound ratings for evaporator fan coils are not available from the manufacturers. We are providing the quietest coil design

available (center-mount) and have never had an issue with sound characteristics of these evaporators. OK

28. **Per spec 2.4.B. Provide automatic hot gas defrost. Provide fully redundant system.**
The room is equipped with both automatic and manual hot gas defrost options. The system is designed such that regular defrost cycles are not required during normal operation. Per pre-bid conversations, redundant refrigeration systems are not required on this project, and were excluded from the scope of our subcontract agreement. OK

Curbs have been coordinated and installed -DG

29. **Provide and coordinate curbs, piping for condenser per spec 2.4.B.4 & 6. Coordinate with GC piping routes, condenser location on roof and power requirements.**
These items are being coordinated with the GC. OK

30. **Provide condensing unit and capacities per architectural specifications and drawings. Install unit and piping per cooler manufacturer requirements and mount on supports shown on architectural drawings.**
The condensing unit and capacities are shown in the product data submittal. Please note that we have upsized the condensing unit slightly from the previous submittal to ensure that we have adequate capacity for pulldown and recovery times. The unit will be installed per manufacturer's requirements and mounted on roof curbs per the project drawings. OK

31. **Cold room cooler: Provide unit and capacities per architectural specifications and drawings. Install unit per manufacturer requirements and as shown on architectural drawings.**
The evaporator coil and its capacity are shown in the product data and its location indicated on our shop drawing. The evaporator coil has also been upsized to match the increased capacity of the condensing unit as noted above. OK

32. **Refrigerant piping shall be installed per cooler manufacturer requirements. Refer to mechanical plans for general diagrammatic routing. Coordinate routing with all other trades.**
Piping shall be installed per manufacturer requirements and routing coordinated with other trades. OK

33. **Refrigerant pipe insulation. Provide jacketing for exterior piping per specification 232500-2.2-D-5. . . .**
The aluminum jacketing requirement was not indicated or referenced in our specification section. We will be pleased to provide pricing for this work, but do not have it included.
Provide the refrigerant insulation jacketing per the specification section given.
Mechanical contractor to provide jacketing if cold room manufacturer doesn't provide. GC TO COORDINATE.

34. **Condensing unit. Provide unit designed and with necessary accessories to operate in conditions between 0 deg. F and 105 deg. F. ambient temperature.**
The condensing unit is designed for operation between -20°F and +110°F. OK

35. **Condensing unit. Provide unit with outdoor enclosure (H) model designation.**
Unit will be provided with outdoor enclosure as indicated on equipment listing and shop drawing. OK

36. **Condensing unit. Provide with accumulator and high pressure safety switch.**
The condensing unit will be provided with both a suction accumulator and high pressure safety switch. OK

37. **Condensing unit: Provide sealed liquid line filter drier and sight glass.**
    The condensing unit will be provided with both a sealed liquid line filter drier and sight glass. OK

A/E: Please confirm this is acceptable

38. **Submittal is missing efficiency information. Provide this data.**
    There is no published efficiency data available at this time. Efficiencies can be calculated from FLA and BTU outputs. All equipment is compliant with federal energy standards.

39. **Submittal is missing warranty information. Provide warranty information.**
    See item #5 above. OK

40. **Electrical information in cold room submittal do not match electrical requirements called for in cold room product data submittal.**
    See item #8 above. OK

41. **Provide self-closing door.**
    Door is self-closing with cam-lift hinges and hydraulic closer device. OK

42. **Heaters to be positioned for easy accessibility for service & replacement.**
    Anti-condensate heaters are positioned under a trim piece at the perimeter of the door that can be removed with a Phillips screwdriver and easily replaced if necessary. OK

Thank you for reviewing these materials. If you have any questions or need additional information, please respond via email to joshua@biocold.com or juffman@biocold.com.

Regards,

Joshua Baker
President

CANNONDESIGN

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

WEBSTER UNIVERSITY ISB
PROJECT NAME

8274 BIG BEND BLVD
ADDRESS

NUMBER

WEBSTER UNIVERSITY
OWNER

CANNON DESIGN
ARCHITECT / ENGINEER

Joe Voypick
SUBMITTED BY

130383-006
CONTRACTOR / CM SUBMITTAL NO.

CANNON DESIGN SUBMITTAL NO.

DRAWING / DETAIL REFERENCE

130383
SPECIFICATION SECTION / PARAGRAPH

MANUFACTURER / SUPPLIER

ITEM / PRODUCT ID

REQUIRED DATE

PRIORITY

○ CRITICAL

ITEM BEING SUBMITTED (check only one)

- ○ Shop Drawings
- ○ Samples (_____ copies)
- ○ LEED Submittal
- ○ Certification / Qualifications
- ○ Record Documents
- ◉ Product Data
- ○ Coordination Drawing
- ○ Calculations
- ○ Schedules
- ○ O&M Manuals
- ○ Other _____

ITEM BEING SUBMITTED FOR (check only one)

◉ Action ○ Information Only ○ Record

REMARKS OR DEVIATIONS

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)

PARIC

PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By:
Devin D. Gates

Joe Voypick
REVIEWED BY

2/9/17
DATE

To be completed by Reviewer

13 0383-006 REV002
CANNON DESIGN SUBMITTAL NUMBER

2/9/17
RECEIVED DATE

- ○ A. No Exceptions Taken
  No further review of submittal is required.
- ◉ B. Make Corrections Noted
  Incorporate corrections in work; resubmission is not required.
- ○ C. Revise and Resubmit
  Revise as noted, and resubmit for review.
- ○ D. Rejected
  Submittal is not in compliance with Contract Documents; provide new submittal.
- ○ E. For Record / Information Only
  Submittal was reviewed for Record / Information purposes only.
- ○ F. Not Required for Review
  Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS ○ See attached sheet(s) for additional comments

SEE MARKUPS.

SEE ATTACHED MECHANICAL AND ELECTRICAL REVIEW COMMENTS.

Kelvin Patel
Digitally signed by Kelvin Patel
DN: C=US, E=kpatel@cannondesign.com, O=Cannon Design, OU=Architect, CN=Kelvin Patel
Date: 2017.02.24 15:15:09-06'00'
REVIEWED BY

2/24/17
DATE

WM TAO & ASSOCIATES
CONSULTING ENGINEERS

Shop Drawing Submittal Review

Transmitted To: Cannon Design

Date: February 24, 2017

Attention: **stl-cac@cannondesign.com**

Contact Person / WTA Field Inspector: Patrick Garner

Project Name: Webster University-**ISB**

Reviewed by: Jerry Reckmann (Mech)
Mark de la Fuente (Elec)

Project No. WT 14127.01 ☐ UPS ☐ Courier ☒ **Email**

Copies	No.	Description
1 PDF	130383E02A	(Submittal No.'s:) (~~R&B CxSRC~~) - Resubmittal
		(Cannon #130383-**006 REV002**)-(Paric #15051-0490)-(~~WES #607~~)
		➢ **Cold Room Product Data**

*Submittal Review Comments

Electrical Review Comments: The BioCold lamp and ballast information does not appear to be correct. The document indicates three 2-watt lamps and a six-watt ballast. The Topaz lamps included in this submittal indicate they are 22-watts each. Provide a ballast compatible with provided lamps.

Coordinate all electrical installation requirements with electrical contractor and manufacture.

Mechanical Review Comments: Provide the refrigerant insulation jacketing per the specification section given. Mechanical contractor to provide jacketing if cold room manufacturer doesn't provide.

c: **Kelvin Patel**
Kpatel@cannondesign.com

☐ Furnish as Submitted ☒ ***Furnish as Noted**

☐ Rejected ☐ Revise & Resubmit

☐ Reviewed ☐

Corrections or comments made on shop drawings during this review do not relieve contractor from compliance with requirements of drawings and specifications. This check is only for review of general conformance with the design concept of project and general compliance with information given in contract documents. Contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.

PARIC
EXPERIENCE. EXCELLENCE.
77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0490

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 02/09/2017

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

Fax;
314-241-2203

RE: Cold Room Product Data REV1

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☑ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	**SENT VIA:**	☐ Returned
☐ Specifications	☐ Attached	☐ Returned for Corrections
☑ Other: Prodcut Data	☐ Separate Cover Via:	☐ Due Date:

Item	*Package*	*Code*	*Rev.*	*Copies*	*Date*	*Description*	*Status*
Submittal		130383-006	2		02/09/2017	Cold Room Product Data REV1	Submitted

NOTES:

CC:

Signed: _____
Devin Gates