

2022-06-23

**REQUEST FOR QUOTATION
LIBRARY REFURBISHMENT
RFQ 34 (2022-06)**

The Toronto Zoo invites you to submit a quotation to provide labour, tools, materials and equipment to complete the refurbishment of the library at the administrative building - Toronto Zoo. All work is to be completed in accordance with the drawings and specifications in the Request for Quotation (RFQ).

The work shall commence as soon as possible once the project is awarded, a Purchase Order has been issued, and required start-up documentation has been received by the Toronto Zoo. All work is to be completed by **Thursday, 2022-09-15**.

The Quotation package includes Instructions, Terms & Conditions, Requirements, Drawings, and Forms. Quoted prices shall remain in effect for a period of ninety (90) days from the Quotation due date.

Site Meeting: By appointment only on **Tuesday 2022-06-28, at 9:00 a.m.** local standard time at the **Toronto Zoo, Administrative-Support Centre, 361A Old Finch Ave., Toronto, Ontario**

Additional meeting times may be added based on interest.

The Board of Management of the Toronto Zoo reserves the right to reject any or all quotes or to accept any quote, should it deem such an action to be in its interests.

If you have any queries regarding this request for quote, please contact Peter Vasilopoulos, Supervisor of Purchasing & Supply, (416) 392-5916. If you have any technical queries regarding this request for quote, please contact Magdalena Rios, Project Coordinator, mrrios@torontozoo.ca.

Yours truly,

Peter Vasilopoulos
Supervisor, Purchasing & Supply

Table of Contents

SECTION	DESCRIPTION	PAGE (S)
RFP LETTER	Invitation Letter	1
T.O.C.	Table of Contents	3
1.0	Instructions	4
2.0	Terms and Conditions	5
3.0	Project Requirements	7
4.0	Submission Forms	12
	Submission Label	14
	Notice of No Bid	15
Appendix A	List of sub-contractors	16
	DRAWINGS	
A0.00	General Notes, Drawing List and Key Plan	
A1.01	Existing layout	
A1.02	Existing RCP	
A2.01	Demolition	
A3.01	Proposed layout	
A3.02	Proposed RCP	
	SPECIFICATIONS	
1	Door specifications	
2	Lights	
3	Air return grills	

1.0 INSTRUCTIONS

- 1.1** Ensure that you have received all **sixteen (16)** pages, **six (6)** drawings, and **three (3)** specifications of the RFQ package.
- 1.2** A site meeting will be held on **Tuesday, 2022-06-28, 0900 hours (9:00am)** meeting at the Toronto Zoo, Administrative-Support Centre, 361A Old Finch Ave., Toronto, Ontario.
- 1.3** Your quotation must be completed, and received by the Supervisor, Purchasing & Supply, by:

Thursday, 2022-07-14, 1200 hours (noon, local time)

Submission – Temporary process - In view of the current situation with COVID 19 and to limit personal interaction, on a temporary basis submissions for this Request for Proposal can be submitted electronically by email in a PDF file, prior to the submission deadline to the following email address

bids@torontozoo.ca

and note the following:

- a. Subject of the file to be: RFQ# - Title of RFQ – Vendor name.
- b. Amendments to a Proposal may be submitted via the same methods, at any time prior to the Closing Time.
- c. It is the Supplier's sole responsibility to ensure its Bid is received by the Submission Deadline in accordance with the requirements of this RFP. The receipt of Bids can be delayed due to a number of factors including "internet traffic", file transfer size and transmission speed. The Supplier should allow sufficient time to download, complete and upload, as applicable, the submission forms comprising its Bid and any attachments.

A Bid will only be considered to be submitted once it has been received by the Toronto Zoo. The time of such receipt is reflected by the time received stamped by the Toronto Zoo's email application

- 1.4** Quotations must not be submitted by facsimile,.
- 1.5** Show itemized cost of HST if applicable.
- 1.6** Toronto Zoo reserves the right to award in whole or in part on the basis of the bids received, Lump Sum Price or Breakdown Price.
- 1.7** All Prices submitted shall be quoted in Canadian currency.
- 1.8** Use the attached submission label, when you submit your response in a sealed envelope or package and deliver to the Toronto Zoo.
- 1.9** Quotation prices shall remain in effect for a period of ninety (90) days from the Quotation due date.

- 1.10** Include product information, samples, and pictures, as necessary.
- 1.11** Provide references of at least three (3) clients for whom your company has performed similar work. References must include photos of three (3) different installations, client company name, contact name, address and e-mail address.
- 1.12** If applicable, suggested alternative products are acceptable, however all such products must be quoted separately and should not replace the Toronto Zoo requested product, work or service.
- 1.13** It is the responsibility of the Bidder to understand all aspects of the RFQ and to obtain clarification if necessary before submitting their quotation.
- 1.14** For any questions concerning the contract terms and conditions of this RFQ, please contact:

Peter Vasilopoulos, Supervisor,
Purchasing & Supply, Tel: 416-392-5916, Fax: 416-392-6711,
E-mail: pvasilopoulos@torontozoo.ca

Any questions regarding the work in this RFQ must be forwarded by the end of the day **Thursday, 2022-07-07** to:

Magdalena Rios,
Project Coordinator,
E-mail: mrrios@torontozoo.ca

2.0 TERMS AND CONDITIONS

- 2.1 Definitions:** Wherever used in the Request for Quotation the word “**Board**” means the Board of Management of the Toronto Zoo and the word “**Vendor**” or “**Contractor**” means the person or persons or Corporation to whom the purchase order is issued.
- 2.2 Vendor Assurance:** Unless otherwise stated, the goods, material, articles, equipment, work or services, specified or called for in or under this Quotation, shall be delivered or completely performed, as the case may be, by the Vendor as soon as possible and in any event within the period set out herein as the guaranteed period of delivery or completion.
- 2.3 Country of Origin:** Wherever possible, the goods, services, materials, articles or equipment, specified or called for in or under this Quotation, shall be of Canadian origin and manufacture.
- 2.4 Delivery:** The prices stated in this Quotation cover the services, material, articles or equipment referred to herein, being delivered F.O.B. destination, freight, express, duty and all other charges prepaid, unless otherwise indicated herein. A detailed delivery ticket or piece tally, showing the exact quantity of goods, material, articles or equipment shall accompany each delivery. A receiver’s receipt shall not bind the Board to accept the goods, material, articles or equipment covered thereby, or the particulars of the delivery ticket or piece tally therefore. The Vendor shall not be entitled to any interest upon any bill due to delay in its approval by the CEO of the Toronto Zoo or his designate.
- 2.5 Invoicing:** Unless otherwise indicated herein, the prices stated are payable in Canadian Funds at the head office of the Board. Any Harmonized Sales Tax (HST) applicable shall be shown as a separate item. The Vendor’s HST/Business registration number must be indicated on the invoice.

The Vendor shall clearly show any special charges such as packaging and freight, where applicable, as separate items on the invoice.

Payments to non-resident Vendors may be subject to withholding taxes under the Income Tax Act (Canada). Unless a non-resident Vendor provides the Board with a letter from Revenue Canada, Taxation waiving the withholding requirements, the Board will withhold the taxes it determines are required under the Income Tax Act (Canada).

- 2.6 Notice of Delivery:** The Vendor shall notify the Purchasing Agent of the Board at the address given for the mailing of invoices, in writing as soon as possible of the details of the shipment of the goods, materials, articles or equipment.
- 2.7 Right to Cancel:** The Board shall have the right to cancel at any time this Quotation or any contract or any part of any contract resulting from this Quotation in respect of the goods, material, articles, equipment, work or services set out in this Quotation or any such contract or part of such contract, not delivered or performed at the time of such cancellation, and the Board will not be responsible to make any payments in respect of any such goods, materials, articles, equipment, work or services and shall not incur any liability whatsoever in respect thereto.

In the event that the Vendor fails or neglects by any act or omission to comply with any of the conditions set out herein, this Quotation or any contract resulting from this Quotation may be unconditionally cancelled by the Board without notice to the Vendor.

- 2.8 Official Agreement:** No verbal arrangement or agreement, relating to the goods, material, articles, equipment, work or services, specified or called for under this Quotation, will be considered binding, and every notice advice or other communication pertaining thereto, must be in writing and signed by a duly authorized person.
- 2.9 Worker's Rights:** The Vendor shall comply with the conditions of the Board relating to Worker's Rights, a copy of which is available on application to the Manager, Fair Wage and Labour Trades Office, City of Toronto, 18th Floor, West Tower, City Hall, Toronto, Ontario, M5H 2N2 or by phone at 416-392-7300.
- 2.10 Indemnity:** The Vendor shall at all times well and truly save, defend, keep harmless and fully indemnify the Board, the City of Toronto, Toronto Region and Conservation Authority and their servants, employees, officers or agents, hereinafter called the "Indemnities", from and against all actions, suits, claims, demands, losses, costs, charges, damages, and expenses, brought or made against or incurred by the Indemnities, its or their servants, officers, employees, agents or invitees in any way relating, directly or indirectly, to goods, material, articles or equipment supplied or to be supplied, or to the supplying of goods or services, pursuant to this Quotation, or any other claim, action, suit, demand, loss, cost, charge, damage or expense relating to copyright, trademark or patent with regard directly or indirectly with any such goods, services, material, articles or equipment or the supply or performance thereof.
- 2.11 Liability for Acts of Vendor Employees, Contractors or Agents:** The Vendor acknowledges responsibility and accepts liability for the acts of any of its employees, contractors and agents while on Toronto Zoo property. The Toronto Zoo reserves the right to request background checks for any individual providing the services requested on behalf of the Vendor.
- 2.12 Guaranty of Quotation:** All goods, material, articles, equipment, work or services, specified or called for in or under this Quotation, shall be supplied or performed at the price or process and on the basis set forth or referred to in and in accordance with the Offer and this Quotation. The basis on which this Quotation is given shall include any specifications, plans, price schedules, samples, addenda or other details pertaining thereto, or provided in connection therewith.
- 2.13 Right of Notice:** Any notice that the Board may be required or desire to give to the Vendor shall for all purposes to be deemed to have been sufficiently and properly given and afforded by registered mail addressed to the Vendor at the address shown for the Vendor on this form and shall therefore be presumed to have been received by the Vendor on the third day following such registration.
- 2.14 Formal Contract:** The Vendor may be required and shall, if requested by the solicitor for the Board so to do, to execute and enter into a formal contract that is satisfactory to the solicitor for the Board, in order to document the contract resulting from this Quotation and to embody indemnity and related provisions that in the opinion of such solicitor are required to protect the Board.

2.15 Charity Status: The Toronto Zoo is a registered charitable organization (registration #BN 119216398RR0001) and accordingly may be eligible for preferred pricing which should be reflected in the Quotation as submitted.

2.16 Performance Evaluation: The Contractor's performance will be evaluated by the Chief Executive Officer and/or Chief Executive Officer's Representative during the Contract and at the end of the Contract. In the event that the Contractor's performance is considered unsatisfactory by the Chief Executive Officer and/or Chief Executive Officer's Representative, the Contractor and/or its affiliates may become ineligible from bidding on future contracts issued by the Board.

3.0 PROJECT REQUIREMENTS

The work shall commence once the project has been awarded and a Purchase Order issued. The scope of work includes supply of all labour, tools, materials and equipment necessary to complete the Library Refurbishment - Toronto Zoo. All work is to be completed in accordance with the drawings and specifications in the Request for Quotation (RFQ). The contractor is responsible for all pricing and all other arrangements with all subcontractors as required.

3.1 SCOPE OF WORK

1. Supply all labour, tools, materials and equipment to complete the work as outlined in the quotation documents, drawings and specifications.
2. All work to be completed in accordance with applicable codes (e.g. Building Code, Electrical Code, Fire Code, etc.)
3. All measurements to be site verified.
4. In accordance with the Zoo's hot work permit, fire watches are to be provided for 4 hours after the hot work has been completed.
5. Hours of work are not restricted.
6. Supply shop drawings for approval prior to fabrication and install.
7. Remove existing light switches. Make good all surface.
8. Demolish wall and existing window to accommodate new doors and sidelights. Reuse (1) window panel if possible (match existing). See point 15 below.
9. Supply and install new partition walls: 2"x4" steel studs @ 16" O/C, with ½" drywall on both sides, finished with primer and two coats of paint, coconut milk color (P5242-14D) from Para Paints. Client to approve if different brand and color is proposed. See plan A3.01, marked as W1.
10. Remove existing carpet tile, dispose offsite. Supply and install new carpet tile in (4) rooms. Manufacturer: Interface, collection: Net Effect, color: Driftwood with GlasBac. Supply and install new trim & base as recommended by manufacturer (provide sample for approval by TZ prior to installation).
11. Remove and reinstall door and frame to the new room labeled as "team Touchdown" on plan A3.01. Reuse frame if possible, provide new if necessary (match existing, see specifications).
12. Supply and install (3) new doors with sidelights (match existing, see specifications).
13. Doors and frames to be reinstalled in new locations. Reuse frames where possible, provide new where necessary (match existing, see specifications).
14. Supply and install (1) window 51"x51" (WxH) (match with existing windows).

15. Remove ceiling tiles and grid. Supply and install new acoustical ceiling tiles: Armstrong Optima, color: white, with 15/16 Square Tegular edge and Prelude ML. See plan A3.02 for reference and paneling sizes.
16. Decommission & remove existing troffer lights. Turn over to the Toronto Zoo.
17. Supply and install (14) new troffer lights, Brand: Lithonia Lighting, model: 2BLT4 A (LED), with air supply, diffuser: TBD, 4800 lumens, 120V, 82CRI, 3500K.
18. Remove existing air return grills. Dispose of all waste offsite.
19. Supply and install (2) 12"X24" air return grill and (2) 24"X24" air return grill. Brand: Nailor Industries, model: 61EC, type: TPS, color: appliance white.
20. Remove electrical as identified in drawings. Such items include: receptacles, light switches, thermostats, and data receptacles.
21. All electric hardware to match existing on site. TZ to approved proposed materials prior installation.
22. Supply and install new electrical receptacles (15) in the four new rooms, as identified in drawings. All receptacles to be 13 ½" from FF., unless written otherwise on plans.
23. Supply and install (12) new data wall plates and (6) new phone wall plates in the four new rooms, as identified in drawings. All receptacles to be 13 ½" from FF., unless written otherwise on plans. Each data wall plate to have (2) jacks, and to use wiring CAT6 or CAT5E.
24. Supply and install (4) new light switches as identified in drawings. All switches to be 47" O/C from FF and 4 ½" O/C from door or sidelight edge.
25. Supply and install (3) new thermostats as identified in drawings. All thermostats to be 60" O/C from FF.
26. Relocate WIFI access point if needed.
27. Relocate sprinklers if needed, in order to comply with fire code. It is the contractor's responsibility to ensure fire code requirements are met. The Contractor is responsible for any pressure testing, etc. that is required to commission the sprinklers.
28. Protect all areas not affected by the work. Any damage to these areas will be the responsibility of the contractor to rectify.
29. Clean the work area and remove all debris from site on a daily basis. Site to remain protected and secure at all times.
30. Excess material will be stored on the Toronto Zoo site for future use. Toronto Zoo staff will designate a suitable area for stockpiling of additional material.
31. ESA permit is the responsibility of the contractor.
32. Any required engineering design is the responsibility of the contractor.

33. The contractor is required to provide closeout documents including but not limited to as built drawings, warranty, and inspection certificates.
34. The contractor shall supply the Zoo with copies of relevant certificates and licences for all workers before commencement of work.

The Contractor is responsible for all pricing and all other arrangements with their subcontractors as required. Work is to be completed by **Thursday, 2022-09-15**.

The following are attached:

DRAWINGS:

General Notes, Drawing List and Key Plan
Existing Layout
Existing RCP
Demolition
Proposed Layout
Proposed RCP

SPECIFICATIONS:

Door specifications
Lights
Air return grills

3.2 CONTRACTOR RESPONSIBILITIES

1. Regular meetings/communication with the Toronto Zoo Project Team to review project status and to discuss issues that may arise during the project.
2. Provide samples, mock ups, etc. as required to the Project Team.
3. Provide product information, MSDS sheets and colour samples to the Project Team prior to start of the work where applicable.
4. Provide the Zoo with a two (2) year warranty upon completion of the project.
5. Protect adjacent areas not included in the project. Any damage caused will be the responsibility of the contractor to rectify at no additional cost to the Zoo.
6. Clean-up the work area daily and make good any damage caused as a result of the work.
7. Secure the work site and provide construction signs and barriers to prevent injury to Zoo personnel and the public who will require access to the space during the work.
8. Upon award of contract, Contractor is to finish all work, including clean up and demobilization by the completion date specified.
9. Submit all shop drawings for review and approval prior to start of fabrication. Review of shop drawings shall not mean that the Toronto Zoo approves detail

design inherent in shop drawings, responsibility for which shall remain with the Contractor submitting same, and such review shall not relieve the Contractor of his responsibility for errors or omissions in shop drawings or of his responsibility for meeting all requirements of the subcontract documents.

10. Submit close out documents as requested. Include warranties and “As built” drawings.

3.3 SAFETY SPECIFICATIONS

1. It is the responsibility of the Contractor to protect the site as required during construction.
2. Ensure that awareness of public safety is considered and protect visitors in the vicinity during the construction period.
3. All necessary personal protective equipment must be worn at all times and MSDS sheets must be available on site as required.
4. The contractor is to abide by applicable Toronto Zoo Health & Safety Policies, the Ontario Health and Safety Acts, the Ontario Building Code and all other applicable codes including the Fire Codes.
 - i. SAFE-002 Health & Safety Hazard Reporting
 - ii. SAFE-017 Contractors Safety
 - iii. SAFE-018 Vehicles on Site
 - iv. SAFE-007 Working in Confined Space
 - v. SAFE-025 Hot Work
 - vi. SAFE-013 Equipment Lockout/Tagout

Toronto Zoo’s Commitment to the City of Toronto’s Corporate Smog Alert Response Plan

5. It is the responsibility of the Contractor to ensure that the work site is properly protected at all times. All work sites must be marked, barriered, and protected adequately with construction signs posted to secure and isolate the work site from the public or other personnel that have access to the area.

3.4 OTHER INFORMATION

The successful bidder must demonstrate the ability to complete the work to standards acceptable to the Zoo and prove past performance in the completion of similar types of work for other clients by providing relevant examples of work and references. The successful bidder must also demonstrate and guarantee that they can produce the work in the allotted time.

4.0 SUBMISSION FORMS:

The undersigned Bidder having reviewed and fully understood the RFQ and all terms and requirements of the RFQ and all terms and conditions of the RFQ and information provided, hereby submits the attached Bid and supporting materials in accordance.

I/We, hereby, have received, allowed for and included as part of our submission all issued Addendum numbered _____.

The Board of Management of the Toronto Zoo reserves the right to reject any or all Bids or to accept any Bid, should it deem such action to be in its interests.

By submitting a Bid the Bidder agrees to all of the terms and conditions of this Request for Proposal.

By signing and submitting this proposal, you are agreeing to the release of your Bid information, as deemed necessary by the Board, in order to conduct business associated with this proposal or project.

COMPANY INFORMATION	
Company Name:	
Name of authorized Signing Officer	Title:
I have authority to bind the organization	
Signature:	Date:
Contact Name:	Title:
Address:	
Telephone #:	Fax #:
Email:	Web Site:
HST #:	

DISCOUNT	Discount	Days
Discount allowed for prompt payment and period within which invoice must be paid to qualify.	%	

4.1 QUOTATION PRICING - LUMP SUM PRICE

DESCRIPTION	Price complete, excluding HST
To provide all labour, tools, materials and equipment necessary to complete Library Refurbishment - Toronto Zoo, as specified in the quotation documents, drawings and specifications of the RFQ package.	\$
HST	
Total	

COMMITMENT TO DELIVER	YES / NO
Please confirm that you are able to complete the work by: Thursday, 2022-09-15.	

WARRANTY	Specify
Please confirm two (2) year warranty upon completion of the project.	

DISCOUNT	Discount	Days
Discount allowed for prompt payment and period within which invoice must be paid to qualify.	%	

Name of Firm:	
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SUBMISSION LABEL**INTENTIONALLY LEFT BLANK**

NOTICE OF NO BID
INSTRUCTIONS:

It is important to the Toronto Zoo to receive a reply from all invited bidders. If you are unable, or do not wish to submit a bid, please complete the following portions of this form. State your reason for not bidding by checking the applicable box(es) or by explaining briefly in the space provided. It is not necessary to return any other Request for Proposal/Quotation/Tender documents or forms. Please just return this completed form by fax or by mail prior to the official closing date. **Purchasing and Supply Fax Number: (416) 392-6711.**

A Proposal/Quotation/Tender is not submitted for the following reason(s):	
<input type="checkbox"/> Project/quantity too large.	<input type="checkbox"/> Project/quantity too small.
<input type="checkbox"/> We do not offer services or commodities to these requirements	<input type="checkbox"/> Cannot meet delivery or completion requirement
<input type="checkbox"/> We do not offer this service or commodity.	<input type="checkbox"/> Agreements with other company do not permit us to sell directly.
<input type="checkbox"/> Cannot handle due to present commitments.	<input type="checkbox"/> Licensing restrictions
<input type="checkbox"/> Unable to bid competitively.	<input type="checkbox"/> We do not wish to bid on this service or commodity in the future.
<input type="checkbox"/> Insufficient information to prepare quote/proposal/tender	<input type="checkbox"/> Specifications are not sufficiently defined
<input type="checkbox"/> We are unable to meet bonding or insurance requirements.	

<u>Other reasons or additional comments (please explain):</u>

Company Name:	
Address	
Contact Person:	
Signature of Company Representative:	
Date:	
Phone Number:	
Email address	
Fax Number:	

APPENDIX A – LIST OF SUB-CONTRACTOR

The Bidder proposes to sublet the following portions of the Work to the persons firms or corporations indicated. The Bidder (Contractor) is responsible for all pricing with all subcontractors.

The Bidder submits that in proposing the under mentioned subcontractors, the Bidder has consulted each and have ascertained to our completed satisfaction that those names are fully acquainted with the extent and nature of the work and that they will execute their work with the requirements of the contract documents.

Work or services to be provided	Name and address of sub-contractor or person	Telephone

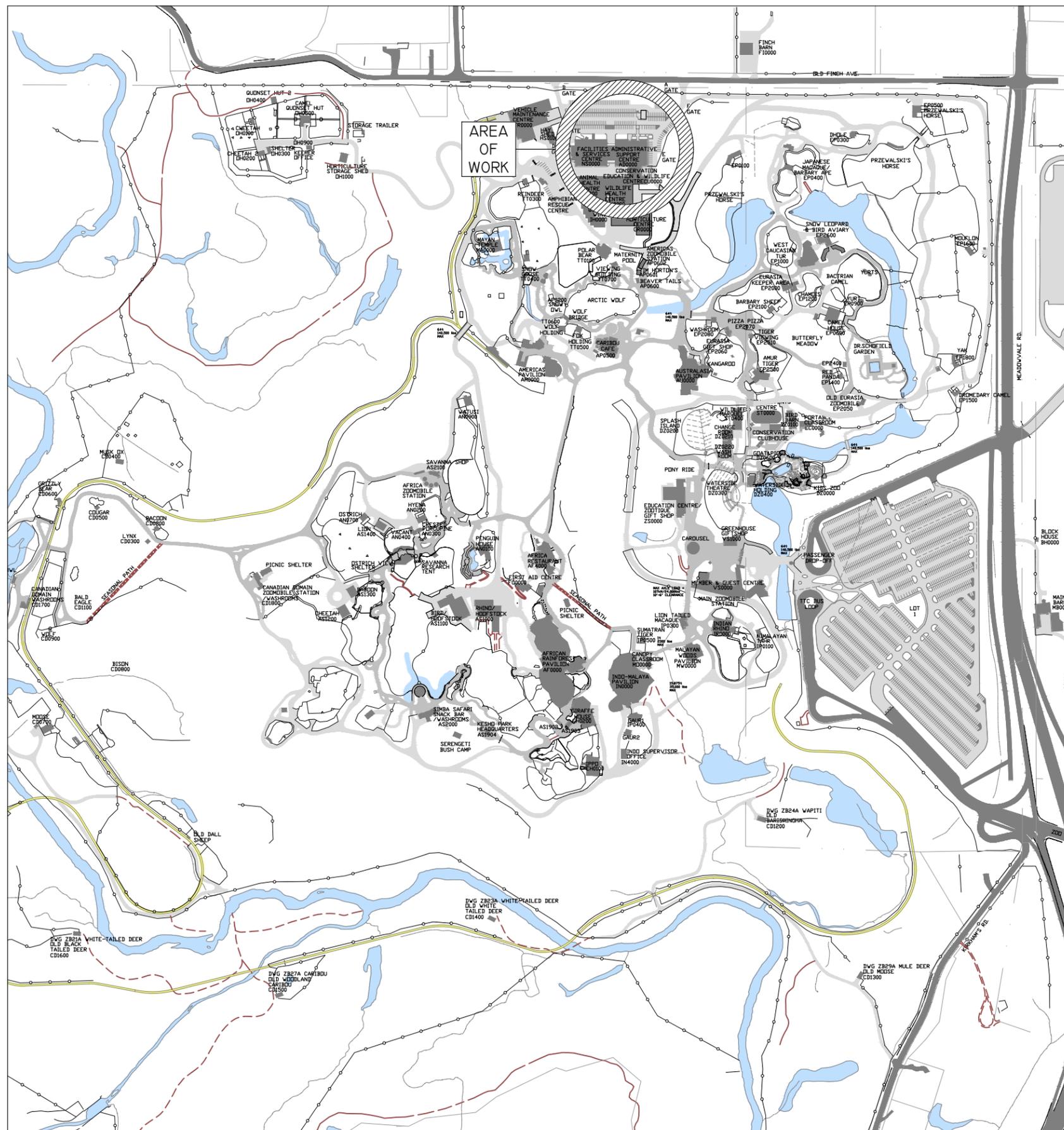
Name of Bidder:	
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GENERAL NOTES:

1. ALL PROJECT WORK IS TO BE COMPLETED IN ACCORDANCE WITH THE MOST UP TO DATE ONTARIO BUILDING CODE (IF APPLICABLE).
2. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE. DO NOT SCALE THESE DRAWINGS.
3. ANY DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE TORONTO ZOO.
4. CONTRACTORS MUST ADHERE TO TORONTO ZOO POLICIES AND OH&S ACT AT ALL TIMES WHEN ON ZOO PROPERTY.
5. CONTRACTORS ARE TO CHECK IN AND OUT AT SECURITY EVERY TIME THEY ARE ENTERING OR EXITING ZOO PROPERTY.
6. ADJACENT AREAS MUST BE PROTECTED DURING SITE WORK, DELIVERY, PLACEMENT AND INSTALLATION OF THE NEW BUILDING.
7. CONTRACTORS ARE TO MAKE GOOD ANY DAMAGES INFLICTED BY THEIR WORK TO ADJACENT AREAS UPON COMPLETION OF THIS PROJECT.
8. THE CONTRACTOR IS RESPONSIBLE FOR THE SUPPLY AND INSTALLATION OF ANY MATERIALS NOT SPECIFICALLY DRAWN OR DESCRIBED BUT REASONABLY IMPLIED AND NECESSARY FOR COMPLETION OF WORK WITHOUT ADDITIONAL COSTS UNDER HIS OR HER CONTRACT.

DRAWING LIST:

1	A0.00	GENERAL NOTES, DRAWING LIST AND KEY PLAN	NTS
2	A1.01	EXISTING LAYOUT	1/4" = 1'-0"
3	A1.02	EXISTING RCP	1/4" = 1'-0"
4	A2.01	DEMOLITION	1/4" = 1'-0"
5	A3.01	PROPOSED LAYOUT	1/4" = 1'-0"
6	A3.02	PROPOSED RCP	1/4" = 1'-0"



361A OLD FINCH AVE.
TORONTO, ON
M1B 5K7

NO.	DESCRIPTION	DATE
X	XXXXX	XXXX.XX.XX

NO.	REVISIONS	DATE
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**LIBRARY
RE-CONFIGURATION**

REVIEWED BY
MANAGER: BEN KNOOP
DATE:
CURATOR:
DATE:
APPROVED BY
COO:
DATE:

**GENERAL NOTES, DRAWING
LIST & KEY PLAN**

PROJECT #: 22OP04-A

DRAWN BY: MR

CHECKED BY:

DATE: 2022-06-16

SCALE: NTS

DRAWING #:

A0.00

SUBJECT: ADMIN. BUILD. DOOR SPECIFICATIONS

DATE: _____

TORONTO ZOO STAFF: _____

CONTRACTOR: _____

This is a general steel door specification:

- 1. SOLID WOOD CORE DOOR INCLUDING NARROW LITE WITH PLASTIC LAMINATE ON BOTH SIDES , SAME COLOUR AS ADJACENT OFFICES
- 2. 16 GAUGE FRAME TO ACCOMMODATE DRYWALL PARTITION
- 3. 2 ¾ BACKSET HOLE PRE- DRILLED FOR STANLEY BEST LOCKS
- 4. 2 1/8 HOLE FOR STANLEY 93K7AB15C-S3-626 H.D. ENTRANCE VARSITY SERIES “LEVER SET WITH HOUSING FOR “BEST 7-PIN 1C- CORE”
- 5. PREP DOOR AND FRAME FOR 4.5” X 4.5” HAGER STANDARD WEIGHT S.S HINGE # AB800 – 3-PER DOOR
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.

DIGITAL NAVIGATION

Ordering Tree nLight Platform Controls Photometrics Performance Data

FEATURES & SPECIFICATIONS

INTENDED USE — The BLT Best-in-Value Low Profile LED luminaire features a popular center basket design that offers a clean, versatile style and volumetric distribution. High efficacy LED light engines deliver energy savings and low maintenance compared to traditional sources. An extensive selection of configurations and options make the BLT the perfect choice for many lighting applications including schools, offices and other commercial spaces, retail, hospitals and healthcare facilities. The low profile BLT design (2-3/8") also makes it an excellent choice for renovation projects.

CONSTRUCTION — Prior to fabrication, BLT components are coated with a proprietary paint blend and die-formed for dimensional consistency.

The BLT reflector is available in both smooth and ribbed finishes. For a ribbed finish, add RIB to the end of the product description. See the ordering tree below for additional detail.

End plates contain easy-to-position integral T-bar clips for securely attaching the luminaire to the T-grid. For additional T-grid security, optional screw on T-bar clips are available.

Diffusers are extruded from impact modified acrylic for increased durability.

LED boards and drivers are accessible from the plenum.

OPTICS — Volumetric illumination is achieved by creating an optimal mix of light to walls, partitions and vertical and horizontal work surfaces – rendering the interior space, objects and occupants in a more balanced, complimentary luminous environment. High performance extruded acrylic diffusers conceal LEDs and efficiently deliver light in a volumetric distribution. Four diffuser choices available – curved and square designs with ribbed or a smooth frosted finish.

ELECTRICAL — Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life. 80% LED lumen maintenance at 60,000 hours (L80/60,000). Color Variation within 3-step MacAdam ellipse (3SDCM).

Non-Configurable BLT: Generic 0-10 volt dimming driver. Dims to 10%

Configurable BLT: available in High Efficiency (HE) versions for applications where a lower wattage (over the standard product) is required. The High Efficiency versions deliver >130 LPW and can be specified via the Lumen Package designations in the Ordering Information below.

eldoLED driver options deliver choice of dimming range, and choices for control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI.

Optional integrated nLight™ controls make each luminaire addressable - allowing it to digitally communicate with other nLight enabled controls such as dimmers, switches, occupancy sensors and photocontrols. Connection to nLight is simple. It can be accomplished with integrated nLight AIR wireless RIO, RES7 sensors, or through standard Cat-5 cabling. nLight offers unique plug-and-play convenience as devices and luminaires automatically discover each other and self-commission. nLight AIR is commissioned easily through an intuitive mobile app.

Lumen Management: Unique lumen management system (option N80) provides on board intelligence that actively manages the LED light source so that constant lumen output is maintained over the system life, preventing the energy waste created by the traditional practice of over-lighting.

Step-level dimming option allows system to be switched to 50% power for compliance with common energy codes while maintaining fixture appearance.

Driver disconnect provided where required to comply with US and Canadian codes.

SENSOR — Integrated sensor (individual control): Sensor Switch MSD7ADCX ((Passive infrared (PIR)) or MSDPD7ADCX ((PIR/Microphonics Dual Tech (PDT)) integrated occupancy sensor/automatic dimming photocell allows the luminaire to power off when the space is unoccupied or enough ambient light is entering the space. See page 4 for more details on the integrated sensor.

Integrated Sensor (nLight Wired Networking): This sensor is nLight-enabled, meaning it has the ability to communicate over an nLight network. When wired, using CAT-5 cabling, with other nLight-enabled sensors, power packs, or WallPods, an nLight control zone is created. Once linked to a Gateway, directly or via a Bridge, the zone becomes capable of remote status monitoring and control via SensorView software. See page 4 for the nLight sensor options.

Integrated Smart Sensor (nLight Air Wireless Platform): The RES7 sensor is nLight AIR enabled, meaning it has the ability to communicate over the wireless nLight control platform. It is available with an automatic dimming photocell, and either a digital PIR or a microphonics (PDT) dual technology occupancy sensor. It pairs to other luminaires and wall switches through our mobile app, CLAIRITY, which allows for simple sensor adjustment. See page 4 for more details on the Integrated Smart Sensor.

INSTALLATION — The BLT's low profile design of only 2-3/8" provides increased installation flexibility especially in restrictive plenum applications. The BLT fits into standard 15/16" and narrow 9/16" T-grid ceiling systems.

Suitable for damp location.

For recessed mounting in hard ceiling applications, Drywall Grid Adapters (DGA) are available as an accessory. See Accessories section.

LISTINGS — CSA Certified to meet U.S. and Canadian standards. IC rated. DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

WARRANTY — 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

NOTE: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Catalog Number
Notes
Type

BLT Series LED

2BLT4

2' x 4'
LED



ADP Diffuser Option



Ribbed Reflector Option



Specifications

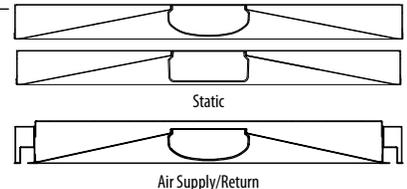
Length: 47-3/4 (121.2)

Width: 23-3/4 (60.3)

Depth: 2-3/8 (6.0)

Depth with Air supply/return: 2-3/4 (6.9)

All dimensions are inches (centimeters) unless otherwise specified.



Embed nLight controls today. Prepare for tomorrow.

Now

- User-friendly install
- Enhanced energy savings
- Code compliance

Tomorrow

- Scalability
- Space configuration
- Future-ready

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details



ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Example: 2BLT4 40L ADP EZ1 LP840

2BLT4		Air function		Lumens ²		Diffuser		Voltage		Driver		Color temperature	
2BLT4	2x4 BLT	(blank) Static A Air supply/ return ¹		Standard efficiency (>100 LPW)	High efficiency^{3,4} (>130 LPW)	ADP Curved, ribbed		(blank) MVOLT		EZ1 eldoLED dims to 1% (0-10 volt dimming)		LP830 82CRI, 3000 K	
				30L 3000	30LHE 3000	ADSM Curved, smooth		120 120V		GZ1 Dims to 1% (0-10V dimming) ⁶		LP835 82CRI, 3500 K	
				40L 4000	40LHE 4000	SDP Square, ribbed		277 277V		GZ10 Dims to 10% (0-10V dimming) ⁶		LP840 82CRI, 4000 K	
				48L 4800	48LHE 4800	SDSM Square, smooth		347 347V ⁵		SLD Step-level dimming ⁷		LP850 82CRI, 5000 K	
				60L 6000	60LHE 6000	Includes trim rings to match sensored version						LP930 90CRI, 3000K	
				72L 7200	72LHE 7200	ADPT Curved, ribbed						LP935 90CRI, 3500K	
				85L 8500	85LHE 8500	ADSMT Curved, smooth						LP940 90CRI, 4000K	
				100L 10000		SDPT Square, ribbed						LP950 90CRI, 5000K	
				120L 12000		SDSMT Square, smooth							

nLight Interface		Control ¹⁰		Individual Control	
nLight Wired		nLight Wired		Individual Control	
(blank)	no nLight [®] interface	(blank)	No sensor control	MSD7ADCX	PIR integral occupancy sensor with automatic dimming control photocell ¹²
N80	nLight with 80% lumen management	NES7	nLight™ nES 7 PIR integral occupancy sensor ¹¹	MSDPDT7ADCX	PDT integral occupancy sensor with automatic dimming control photocell ¹²
N80EMG	nLight with 80% lumen management For use with generator supply EM power ⁸	NESPDT7	nLight™ nES PDT 7 dual technology integral occupancy control ¹¹		
N100	nLight without lumen management	NES7ADCX	nLight™ nES 7 ADCX PIR integral occupancy sensor with automatic dimming photocell ¹¹		
N100EMG	nLight without lumen management For use with generator supply EM power ⁸	NESPDT7ADCX	nLight™ nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell ¹¹		
nLight Wireless		nLight Wireless			
(blank)	no nLight [®] interface	RES7	nLight AIR PIR integral occupancy sensor with automatic dimming photocell for Networking Capabilities		
NLTAIR2	nLight AIR Generation 2 enabled ⁹	RES7PDT	nLight AIR microphonics dual technology occupancy sensor with automatic dimming photocell		
		RIO	nLight AIR radio module without sensor		
		RES7EM	nLight AIR PIR integral occupancy sensor with automatic dimming photocell and UL924 Emergency Operation, via power interrupt detection ²⁴		
		RES7PDTEM	nLight AIR microphonics dual technology occupancy sensor with automatic dimming photocell and UL924 Emergency Operation, via power interrupt detection ²⁴		
		RIOEM	nLight AIR radio module less sensor, with UL924 Emergency Operation, via power interrupt detection ²⁴		

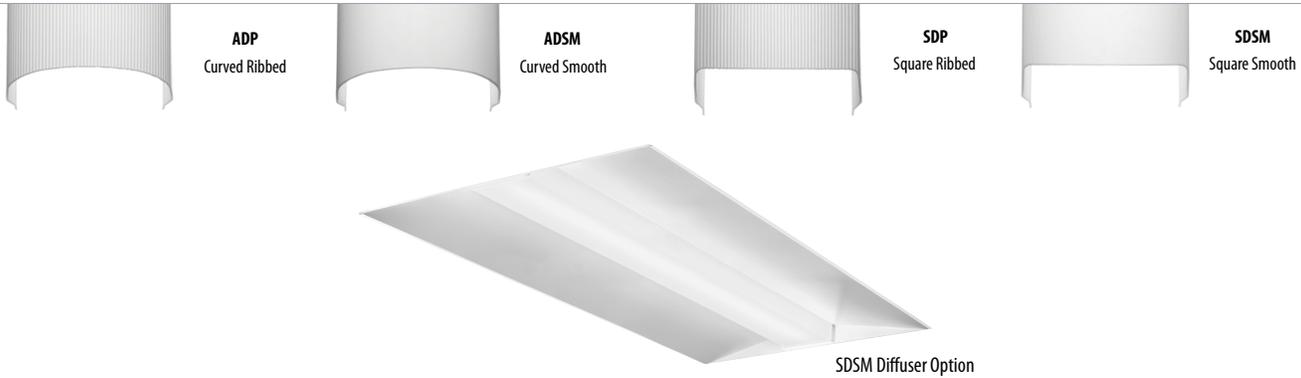
Standby Mode		Options					
NOC	NOC Occupancy sensor disabled ¹³	RIB	Ribbed reflector	CP	Chicago plenum ¹⁶	GLR	Fast-blowing fuse ¹⁹
		EL7L	700 lumen battery pack (Noncompliant with CA T20) ¹⁴	BGTD	Bodine Generator Transfer Device ¹⁷	GMF	Slow-blowing fuse ¹⁹
		EL14L	1400 lumen battery pack (Noncompliant with CA T20) ¹⁴	PWS1836	6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit	NPLT	Narrow pallet
		EL14LSD	1400 lumen battery pack with self-diagnostic testing feature (Noncompliant with CA T20) ^{14,15}	PWS1846	6' pre-wire, 3/8" diameter, 18 gauge, 2 circuit	RRL_	RELOC [®] -ready luminaire ²⁰
		E10WLCP	EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS ¹⁴	PWS1846 PWSLV	Two cables: one 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuits; one 6' pre-wire, 3/8" diameter, 18 gauge, purple and gray ¹⁸	LATC	Earthquake clip
				PWS1856LV	6' pre-wire, 3/8" diameter, 18 gauge, 1 circuit w/low voltage purple and grey wires ¹⁸	DWAM	Anti-Microbial paint
						JP14	Job packaging ²¹
						JP18	Job packaging ²²
						IP5X	Gasketed diffuser com partment to meet IP5X rating ²³

Notes

- Consult factory for airflow data.
- Approximate lumen output.
- All versions may not achieve 130+ LPW. Refer to photometry on www.acuitybrands.com.
- Air supply/return option, 90 CRI, and versions with integral sensor trim rings may not achieve 130 LPW.
- Not available with SLD, EL7L, EL14L, or E10WLCP options.
- GZ1 and GZ10 not available with any Control or Sensor options.
- Not available with N80, N80EMG, N100, N100EMG, NLTAIR, or occupancy control.
- nLight EMG option requires a connection to existing nLight network. Power is provided from a separate N80 or N100 enabled fixture.
- Must order with RES7, RES7PDT, or RIO module. Only available with EZ1 driver. Not available with 85L, 100L, or 120L options.
- Must specify diffuser with trim rings. See sensor options on page 4.
- Requires N80, N80EMG, N100, or N100EMG. Only available with EZ1 driver.
- Only available with EZ1 driver option. 0-10V dimming wires not accessible via access plate.
- Can only be ordered in conjunction with EZ1, NLTAIR2, RES7/RES7PDT. Occupancy sensor disabled at factory but can be re-enabled upon commissioning.
- When using pre-wire option, use PWS1846 or PWS1846 PWSLV.
- For more information, please see the [PSSD2 specification sheet](#).
- Not available with N80, N80EMG, N100, or N100EMG.
- Must specify voltage. Requires BSE labeling, voltage specific. Consult factory for options.
- Not available with nLight wired/wireless network or individual controls.
- Must specify voltage, 120 or 277, with GLR and GMF fusing.
- For ordering logic consult [RRL_2013](#).
- Only available on fixtures with NES7, NESPDT7, NESPDT7ADCX, MSD7ADCX, MSDPDT7ADCX, RES7, RES7PDT, RIO. Not available when air supply/return function and sensor options are combined.
- Not available with option: NES7, NESPDT7, NESPDT7ADCX, MSD7ADCX, MSDPDT7ADCX, RES7, RES7PDT, RIO.
- Not available with air supply/return or Wired Networking (NES_) and Individual Control (MSD_) sensors.
- See UL924 Sequence of Operation chart on page 3. Not available with 72L, 72LHE, or 85LHE lumen packages.

2BLT Volumetric Recessed Lighting 2'x4'

Multiple Diffuser Options

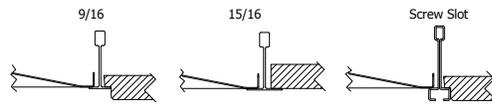


Non-Configurable BLT

Non-Configurable BLT								
Stock/MTO	Catalog Description *	UPC	Lumens	Wattage	LPW	Color Temperature	Voltage	Pallet Qty
Stock	2BLT4 40L ADP LP835	00190887470789	4000	31	129	3500K/82 CRI	120-277	28
	2BLT4 40L ADP LP840	00190887470765	4063	31	131	4000K/82CRI	120-277	28
	2BLT4 46L ADP LP835	00190887468656	4960	38	131	3500K/82 CRI	120-277	28
	2BLT4 46L ADP LP840	00190887468649	5039	38	133	4000K/82CRI	120-277	28
	2BLT4 40L ADP EL14L LP835	00190887470925	4000	31	129	3500K/82 CRI	120-277	28
	2BLT4 40L ADP EL14L LP840	00190887470918	4063	31	131	4000K/82 CRI	120-277	28
	2BLT4 46L ADP EL14L LP835	00190887468670	4960	38	131	3500K/82 CRI	120-277	28
	2BLT4 46L ADP EL14L LP840	00190887468663	5039	38	133	4000K/82 CRI	120-277	28
MTO	2BLT4 40L ADP 347 LP835	00193047562188	4000	31	129	3500K/82 CRI	347	28
	2BLT4 40L ADP 347 LP840	00193047059183	4063	31	131	4000K/82CRI	347	28
	2BLT4 46L ADP 347 LP835	00193047562225	4960	38	131	3500K/82 CRI	347	28
	2BLT4 46L ADP 347 LP840	00193047686426	5039	38	133	4000K/82CRI	347	28

*Generic 0-10V Dimming to 10%.

MOUNTING DATA	
Ceiling Type	Appropriate Trim Type
Exposed grid tee (1' and 9/16")	G
Concealed grid tee	G
Plaster or plasterboard	G*



*DGA accessory available to provide ceiling trim flange and fixture support for plaster or plasterboard ceiling. Recommended rough-in dimensions for DGA installation is 24-3/4" x 24-3/4" (Tolerance is +1/8", -0").

UL924 Sequence of Operation
For 90 minutes following any complete AC power interruption >200 ms:
<ul style="list-style-type: none"> Digital dimming is commanded to high end trim level. Device ignores wireless lighting control commands.

Accessories & Replacement Parts

Accessories: Order as separate catalog number.	
DGA24	Drywall grid adapter for 2x4 recessed fixture
2X4SMKSH PAF	Surface Mount Troffer Kit Post Paint

Replacement Parts: Order as separate catalog number.		
*249P2N	2DBLT48 ADP LENS ASSEMBLY	4 ft. replacement lens
*249P2T	2DBLT48 SDP LENS ASSEMBLY	4 ft. replacement lens
*249P30	2DBLT48 ADSM LENS ASSEMBLY	4 ft. replacement lens
*249P33	2DBLT48 SDSM LENS ASSEMBLY	4 ft. replacement lens
*237LT2	2DBLT48 ADPT LENS ASSEMBLY	4 ft. replacement lens
*237LT4	2DBLT48 SDPT LENS ASSEMBLY	4 ft. replacement lens
*237LT6	2DBLT48 ADSMT LENS ASSEMBLY	4 ft. replacement lens
*237LT8	2DBLT48 SDSMT LENS ASSEMBLY	4 ft. replacement lens
*237LTA	2DBLT48 ADPT SENSOR LENS ASSEMBLY	4 ft. replacement lens
*237M52	2DBLT48 SDPT SENSOR LENS ASSEMBLY	4 ft. replacement lens
*237M5A	2DBLT48 ADSMT SENSOR LENS ASSEMBLY	4 ft. replacement lens
*237M5L	2DBLT48 SDSMT SENSOR LENS ASSEMBLY	4 ft. replacement lens

nLight Platform

nLight embedded fixtures offer:	Customers get:
Manual Dimming	Convenience and visual comfort for occupants
Motion Sensing and/or Daylight Harvesting	Energy savings and code compliance
Fixture or Group Level Control	Ability to configure lighting to the space requirements
Flexibility	Ease of fixture moves, adds and changes
Wireless Wall Switch (nLight AIR Only)	Ease and flexibility of placement
Astronomical and Time of Day Scheduling	Energy savings and building security
Scalable Solution	nLight controls to grow with your business
Future-Ready	nLight platform to set foundation for future upgrades and capabilities

nLight Air Wireless



Simple as 1,2,3

1. Install the nLight® AIR fixtures with embedded smart sensor
2. Install the wireless battery-powered wall switch
3. With CLAIRITY app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome



nLight Wired Networking



Simple as 1,2,3

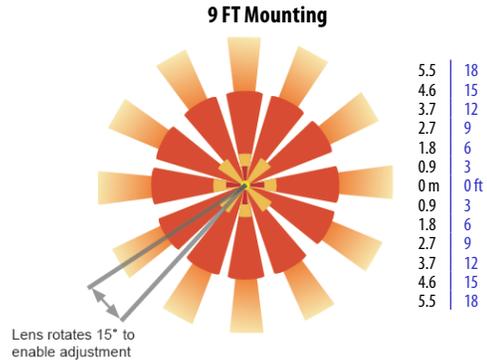
1. Install the nLight® Wired fixtures with embedded control
2. Install the nLight Wired wall switch
3. Connect the fixtures using standard CAT5e cables and the devices will automatically discover each other and work (plug and play)

2BLT Volumetric Recessed Lighting 2'x4'

Sensor Options					
Option	Automatic Dimming Photocell	Occupancy Sensing		nLight Wired Networking	nLight AIR Networking
		PIR	PDT		
MSD7ADCX	X	X			
MSDPDT7ADCX	X		X		
NES7		X		X	
NES7ADCX	X	X		X	
NESPDT7			X	X	
NESPDT7ADCX	X		X	X	
RES7	X	X			X
RESPDT7	X	X	X		X

Sensor Coverage Pattern Mini 360° Lens

- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m).
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m)
- Initial detection will occur earlier when walking across sensor's field of view than when walking directly at sensor



Integrated Sensor with Individual Control

The MSD7ADCX PIR occupancy sensor/automatic dimming photocell is ideal for areas without obstructions and where daylight harvesting may be desired. Suggested applications include, but not limited to, hallways, corridors, storage rooms, and breakrooms or other areas where people are typically moving.

The MSDPDT7ADCX PIR/Microphonics Dual Tech occupancy sensor/automatic dimming photocell is ideal for areas with obstructions and where daylight harvesting is desired. Suggested applications include, but not limited to, open offices, private offices, classrooms, public restrooms, and conference rooms.

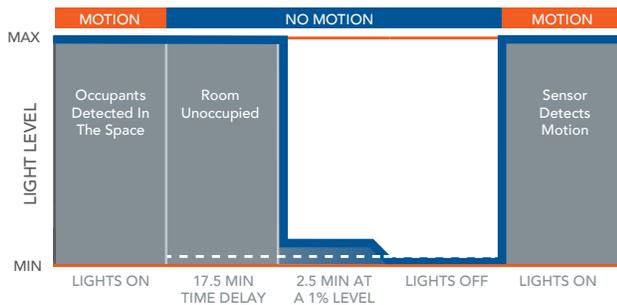
nLight AIR Wireless

nLight AIR is the ideal solution for retrofit or new construction spaces where adding additional wiring can be labor intensive and nLight AIR is available with or without an integral sensor. The integrated rES7 or rES7PDT smart sensors are part of each luminaire in the nLight AIR network, which can be grouped to control multiple luminaires. The granularity of control with the digital PIR occupancy detection and daylight sensing makes a great solution for any application.

nLight Wired Networking

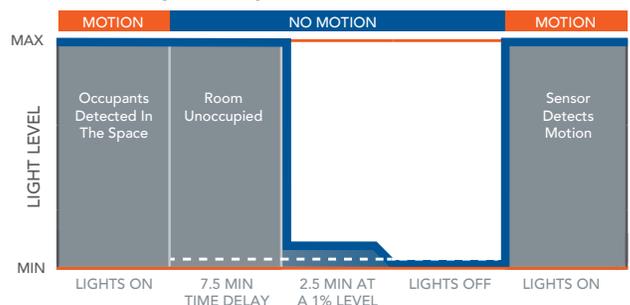
The nES 7 is ideal for small rooms without obstructions or areas with primarily walking motion. Ideal areas include hallways, corridors, storage rooms, and breakrooms. Additionally, the nES7ADCX includes an integrated photocell, which enables daylight harvesting controls. For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the nESPDT7ADCX includes an integrated photocell, which enables daylight harvesting controls which is ideal for areas where windows are present.

Sequence of Operation (MSD7 Sensor)



*The presetting on the automatic dimming photocell is 5fc.

Sequence of Operation (nES7 and rES7 and Sensor)



*The presetting on the automatic dimming photocell is 5fc (NES7) and 10fc (RES7).

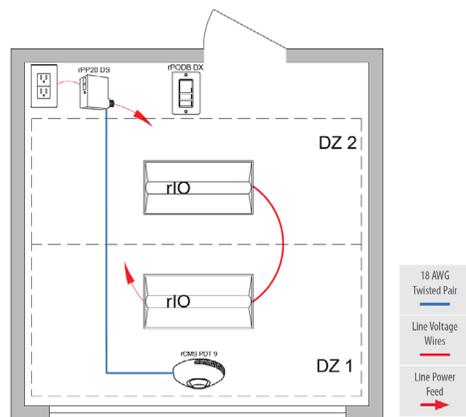
2BLT Volumetric Recessed Lighting 2'x4'

Controls Accessories

nLight® Wired Control Accessories: <i>Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlight.</i>			
WallPod stations	Model number	Occupancy sensors	Model number
On/Off	nPODMA [Color]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 RJB / nCM PDT 9 RJB
On/Off & raise/lower	nPODMA DX [Color]	Large motion 360°, ceiling (PIR / dual tech)	nCM10 RJB / nCM PDT 10 RJB
Graphic touchscreen	nPOD TOUCH [Color]	Wall switch with raise/lower	nWSX PDT LV DX [color]
Photocell controls	Model number	Cat-5 cable (plenum rated)	Model number
Full range dimming	nCM ADCX RJB	10' cable	CAT5 10FT J1
		30' cable	CAT5 30FT J1

nLight® AIR Control Accessories: <i>Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlightair.</i>	
Wall switches	Model number
On/Off single pole	rPODBA [color] G2
On/Off two pole	rPODB A2P [color] G2
On/Off & raise/lower single pole	rPODBA DX [color] G2
On/Off & raise/lower two pole	rPODBA 2P DX [color] G2

BLT fixtures with integrated rIO devices complement any small office space. Pair them with an rCMS occupancy sensor and the space now has wireless occupancy sensing and dimming capability. For additional configuration options please consult with Tech Support.



rCMS ¹		Example: RCMS PDT 10 AR G2					
Series / Detection	Power Supply ¹	Occupancy Detection	Lens (Required)	Operating Mode	Generation		
RCMS nLight AIR occupancy and daylight sensor	[blank] Power Supply ordered separately PS 150 Standard 150 mA Power Supply	[blank] PIR Detection PDT Dual Tech PIR/Microphonics	10 Large Motion/ Extended Range 360° 9 Small Motion/ Extended Range 360° 6 High Bay 360° Lens	[BLANK] None AR Auxiliary Relay	G2 Generation 2 compatibility		

Notes

1 RCMS requires low voltage power from either RPP20 DS 24V G2 or PS150.



Sensor Switch
WSX



nLight WIRED
NPOD UNITOUCH



nLight WIRED
nPODMA DX



nLight AIR
rPODBA



BLT with rIO



rPODBA

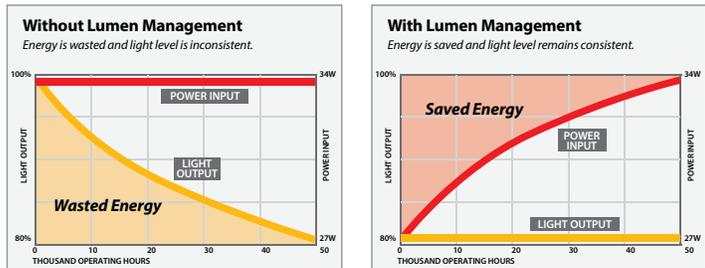


rCMS

2BLT Volumetric Recessed Lighting 2'x4'

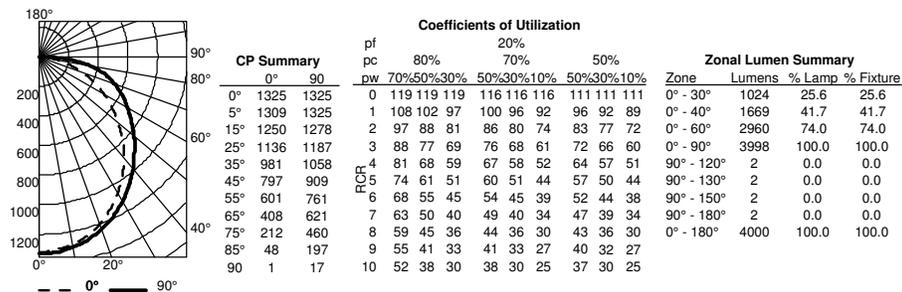
Constant Lumen Management

Enabled by the embedded nLight control, the BLT actively tracks its run-time and manages its light source such that constant lumen output is maintained over the system life. Referred to as lumen management, this feature eliminates the energy waste created by the traditional practice of over-lighting.

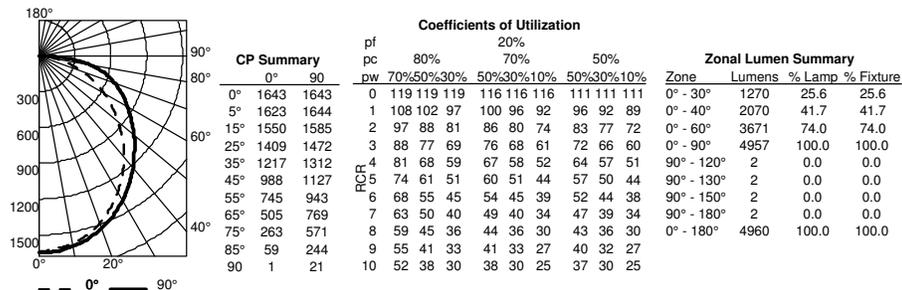


PHOTOMETRICS

2BLT4 40L ADP LP835, 4000 delivered lumens, test no. ISF36900P109, tested in accordance to IESNA LM-79



2BLT4 48L ADP LP835, 4960 delivered lumens, test no. ISF 36900P117, tested in accordance to IESNA LM-79



2BLT Volumetric Recessed Lighting 2'x4'

Performance Data					
Model Number	Lumens	LPW	Watts	DLC Listing	DLC ID
2BLT4 30L ADP E21 (GZ1, GZ10) LP835 [All Options]	2962	127.31	23.26	Premium	PWJDEMHS
2BLT4 30L ADP E21 (GZ1, GZ10) LP840 [All Options]	3009.28	129.34	23.26	Premium	P18J5GLD
2BLT4 30L ADPT E21 (GZ1, GZ10) LP840 [All Options]	2969.16	127.62	23.26	Premium	P3HB2XSG
2BLT4 40L ADP E21 (GZ1, GZ10) LP835 [All Options]	4000	126.22	31.69	Premium	PDWKYXFD
2BLT4 40L ADP E21 (GZ1, GZ10) LP840 [All Options]	4063.86	128.23	31.69	Premium	PEYXAZWD
2BLT4 40L ADPT E21 (GZ1, GZ10) LP835 [All Options]	3946.66	124.53	31.69	Premium	PS63CPK6
2BLT4 40L ADPT E21 (GZ1, GZ10) LP840 [All Options]	4009.67	126.52	31.69	Premium	PK79UR9W
2BLT4 48L ADP E21 (GZ1, GZ10) LP835 [All Options]	4960	130.5	38	Premium	PJ9CK6C1
2BLT4 48L ADP E21 (GZ1, GZ10) LP840 [All Options]	5039.18	132.58	38	Premium	P9W2R5AK
2BLT4 48L ADPT E21 (GZ1, GZ10) LP835 [All Options]	4893.86	128.76	38	Premium	PPFKZU3U
2BLT4 48L ADPT E21 (GZ1, GZ10) LP840 [All Options]	4971.99	130.82	38	Premium	PC8HMC9
2BLT4 60L ADP E21 (GZ1, GZ10) LP835 [All Options]	6016	126.39	47.59	Premium	PSJ6QERM
2BLT4 60L ADP E21 (GZ1, GZ10) LP840 [All Options]	6112.04	128.4	47.59	Premium	PVXQXUV
2BLT4 60L ADPT E21 (GZ1, GZ10) LP835 [All Options]	5935.78	124.7	47.59	Premium	PHT84BW4
2BLT4 60L ADPT E21 (GZ1, GZ10) LP840 [All Options]	6030.55	126.69	47.59	Premium	PXV55B8
2BLT4 72L ADP E21 (GZ10) LP840 [All Options]	7360.66	125.3	58.74	Premium	PSCZ22CB
2BLT4 72L ADP GZ1 LP835 [All Options]	7245	119.07	60.84	standard	PISHTCTS
2BLT4 72L ADP GZ1 LP840 [All Options]	7360.66	120.97	60.84	standard	PBERALG7
2BLT4 72L ADPT E21 (GZ1, GZ10) LP835 [All Options]	7148.4	117.48	60.84	standard	PDQS3CYK
2BLT4 72L ADPT E21 (GZ10) LP840 [All Options]	7262.52	123.63	58.74	Premium	P2KKMMVN
2BLT4 72L ADPT GZ1 LP840 [All Options]	7262.52	119.36	60.84	standard	P10DUPC0
2BLT4 85L ADP E21 (GZ1, GZ10) LP835 [All Options]	8567	116.43	73.58	standard	PYD2G06V
2BLT4 85L ADP E21 (GZ1, GZ10) LP840 [All Options]	8703.77	118.28	73.58	standard	P8Z4IV4X
2BLT4 85L ADPT E21 (GZ1, GZ10) LP835 [All Options]	8452.77	114.87	73.58	standard	PTZEW3QM
2BLT4 85L ADPT E21 (GZ1, GZ10) LP840 [All Options]	8587.72	116.71	73.58	standard	P01DMEK9
2BLT4 100L ADP E21 (GZ1, GZ10) LP835 [All Options]	9837	103.14	95.36	standard	PGDES20R
2BLT4 100L ADP E21 (GZ1, GZ10) LP840 [All Options]	9994.04	104.79	95.36	standard	P007CHGX
2BLT4 100L ADPT E21 (GZ1, GZ10) LP835 [All Options]	9705.84	101.77	95.36	standard	PSZUQY7M
2BLT4 100L ADPT E21 (GZ1, GZ10) LP840 [All Options]	9860.79	103.39	95.36	standard	P6V6X6HY
2BLT4 120L ADP E21 (GZ1, GZ10) LP835 [All Options]	11709	118.18	99.07	standard	PGM4Y7DP
2BLT4 120L ADP E21 (GZ1, GZ10) LP840 [All Options]	11895.9	120.07	99.07	standard	P00DDCG2
2BLT4 120L ADPT E21 (GZ1, GZ10) LP835 [All Options]	11552.9	116.61	99.07	standard	PXM0F509
2BLT4 120L ADPT E21 (GZ1, GZ10) LP840 [All Options]	11737.3	118.47	99.07	standard	PJ4GEBZM

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HE Performance Data					
Model Number	Lumens	LPW	Watts	DLC Listing	DLC ID
2BLT4 30LHE ADP E21 (GZ1, GZ10) LP835 [All Options]	3107	135.17	22.98	Premium	P7KEICW5
2BLT4 30LHE ADP E21 (GZ1, GZ10) LP840 [All Options]	3156.6	137.33	22.98	Premium	PDOM06BH
2BLT4 30LHE ADPT E21 (GZ1, GZ10) LP835 [All Options]	3065.57	133.37	22.98	Premium	P7PZAJDZ
2BLT4 30LHE ADPT E21 (GZ1, GZ10) LP840 [All Options]	3114.51	135.5	22.98	Premium	P2N23EBP
2BLT4 40LHE ADP E21 (GZ1, GZ10) LP835 [All Options]	4085	138.56	29.48	Premium	P67P6SSY
2BLT4 40LHE ADP E21 (GZ1, GZ10) LP840 [All Options]	4150.21	140.77	29.48	Premium	P95UQD66
2BLT4 40LHE ADPT E21 (GZ1, GZ10) LP835 [All Options]	4030.53	136.71	29.48	Premium	PC15DQEC
2BLT4 40LHE ADPT E21 (GZ1, GZ10) LP840 [All Options]	4094.88	138.89	29.48	Premium	PGRCJSJT
2BLT4 48LHE ADP E21 (GZ1, GZ10) LP835 [All Options]	4770	138.16	34.52	Premium	PXBJBG8
2BLT4 48LHE ADP E21 (GZ1, GZ10) LP840 [All Options]	4846.15	140.37	34.52	Premium	P5PQ5RRX
2BLT4 48LHE ADPT E21 (GZ1, GZ10) LP835 [All Options]	4706.4	136.32	34.52	Premium	P2NK2H33
2BLT4 48LHE ADPT E21 (GZ1, GZ10) LP840 [All Options]	4781.53	138.5	34.52	Premium	PK8C1321
2BLT4 60LHE ADP E21 (GZ1, GZ10) LP835 [All Options]	5894	135.12	43.61	Premium	PQZN176R
2BLT4 60LHE ADP E21 (GZ1, GZ10) LP840 [All Options]	5988.09	137.28	43.61	Premium	PG5CYJUC
2BLT4 60LHE ADPT E21 (GZ1, GZ10) LP835 [All Options]	5815.41	133.32	43.61	Premium	PZ72TAWM
2BLT4 60LHE ADPT E21 (GZ1, GZ10) LP840 [All Options]	5908.25	135.45	43.61	Premium	PRC4W72B
2BLT4 72LHE ADP E21 (GZ1, GZ10) LP835 [All Options]	7149	135.94	52.58	Premium	PUB38GEQ
2BLT4 72LHE ADP E21 (GZ1, GZ10) LP840 [All Options]	7263.13	138.11	52.58	Premium	P7GDHZTN
2BLT4 72LHE ADPT E21 (GZ1, GZ10) LP835 [All Options]	7053.68	134.12	52.58	Premium	P5CC2VKV
2BLT4 72LHE ADPT E21 (GZ1, GZ10) LP840 [All Options]	7166.29	136.26	52.58	Premium	P6P1BKDM
2BLT4 85LHE ADP E21 (GZ1, GZ10) LP835 [All Options]	8158	128.96	63.25	Premium	PRTW6BXW
2BLT4 85LHE ADP E21 (GZ1, GZ10) LP840 [All Options]	8288.24	131.02	63.25	Premium	P6H1V2D6
2BLT4 85LHE ADPT E21 (GZ1, GZ10) LP835 [All Options]	8049.22	127.24	63.25	Premium	P1VGSTA3
2BLT4 85LHE ADPT E21 (GZ1, GZ10) LP840 [All Options]	8177.73	129.27	63.25	Premium	PNSBKJ6E

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How to Estimate Delivered Lumens in Emergency Mode

Use the formula below to estimate the delivered lumens in emergency mode

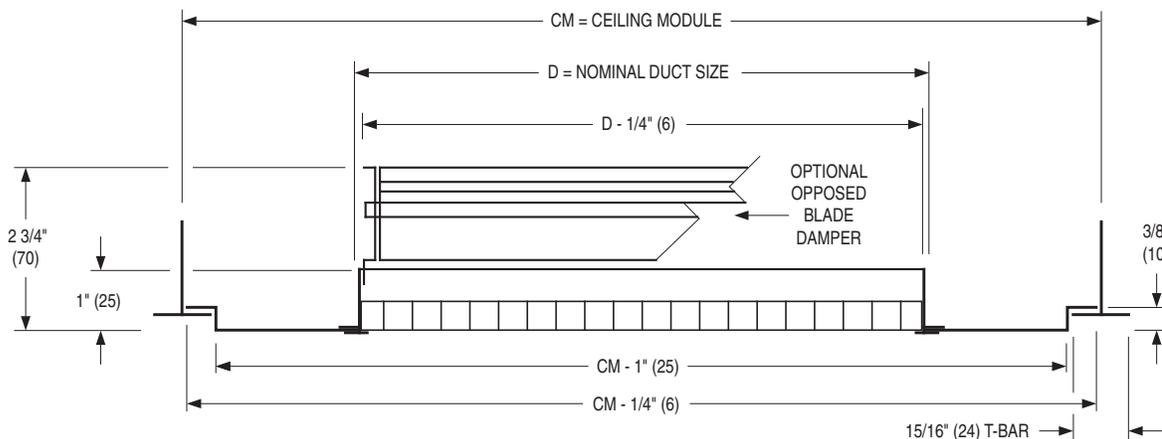
$$\text{Delivered Lumens} = 1.25 \times P \times \text{LPW}$$

P = Output power of emergency driver. P = 10W for E10WLCP option.
LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet. LPW = Lumen per watt rating of the luminaire. LPW information available in Performance Data section.



EGGCRATE RETURN GRILLES & REGISTERS
 ALUMINUM CORE • STEEL FRAME
 TEGULAR PANEL MOUNTED • LAY-IN T-BAR
MODELS: 61EC(-O) TYPE TPS

TO MATCH TEGULAR TILE LAY-IN 1" (25) T-BAR TYPE CEILING SYSTEMS



AVAILABLE CEILING MODULE SIZES		
Imperial Modules		Metric Modules
Imperial Units (in.)	Metric Units (mm)	S.I. Units (mm)
12 x 12	305 x 305	300 x 300
24 x 12	610 x 305	600 x 300
36 x 12	914 x 305	900 x 300
48 x 12	1219 x 305	1200 x 300
20 x 20	508 x 508	500 x 500
24 x 24	610 x 610	600 x 600
36 x 24	914 x 610	900 x 600
48 x 24	1219 x 610	1200 x 600

Maximum Duct/Neck Size D = Ceiling Module - 3" (76)

- MODEL 61EC** Eggcrate Return Air Grille
- Type TPS** Tegular Steel Panel

- MODEL 61EC-O** Eggcrate Return Air Register (Includes O. B. Damper)
- Type TPS** Tegular Steel Panel

DESCRIPTION:

- Material: Aluminum core with corrosion-resistant steel frame mounted in an extended panel.
- Models 61EC and 61EC-O Type TPS have been specially designed for high capacity (90% free area) return air applications and to integrate with and compliment standard 1 (25) nominal exposed grid T-Bar suspended ceiling systems utilizing tegular (drop face) ceiling tiles. The return grille or register is mechanically assembled and using a special frame captures the module sized panel, which eliminates welding and assures a clean smooth blemish free painted finish.
- 1/2" x 1/2" x 1/2" (13 x 13 x 13) aluminum grid core standard (code CA).
- Optional roll-formed steel opposed blade damper has a screwdriver slot operator accessible through face of register.
- Standard finish is AW Appliance White.

OPTIONS:

- Finish:
 - SP Special _____ .
- Non-standard core:
 - CB 1/2" x 1/2" x 1" (13 x 13 x 25)
 - CC 1" x 1" x 1" (25 x 25 x 25)

SCHEDULE TYPE:		Dimensions are in inches (mm).			
PROJECT:					
ENGINEER:	DATE	B SERIES	SUPERSEDES	DRAWING NO.	
CONTRACTOR:	11 - 11 - 15	6100	6 - 2 - 14	61EC-4A	