

PROPOSAL

**Massachusetts Institute of Technology
Mr. Eugene Zeleny
Mechanical Engineer**

**Large Hazelnut Chamber Structure
Environmental Walk-In Chamber**

**Prepared By
Raymond H. McCabe
Product Sales Specialist**

July 23, 2018

*"Leading manufacturer of controlled
environmental chambers worldwide
since 1972."*

*"Highest quality products for research,
storage and testing"*

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A.1. QUOTATION / PRICING SUMMARY

QUOTATION DATE	SALES REPRESENTATIVE	INQUIRY DATE
July 23, 2018	BES	June, 2018

To: Mr. Eugene Zeleny
Mechanical Engineer
Massachusetts Institute of Technology
Middleton, MA

Tel: 857-636-8276

e-mail: ezeleny@mit.edu

Quote #: W180629H

ESTIMATED SHIPPING DATE	SHIP VIA	F.O.B. POINT	TERMS
See Attached Information	Contract Haul	Site, Installed	Progress Payments

Item #	a. Base Contract Pricing	AMOUNT
	<p>Bahnson Environmental Specialties (BES) is pleased to provide pricing to furnish and install the Chamber Structure at your facility as per Scope of work below.</p> <p style="text-align: right;">Total Cost: \$65,107.00</p>	

WE ARE PLEASED TO SUBMIT THE ABOVE QUOTATION FOR YOUR CONSIDERATION. SHOULD YOU PLACE AN ORDER, BE ASSURED IT WILL RECEIVE OUR PROMPT ATTENTION. THIS QUOTATION IS VALID FOR 30 DAYS. THEREAFTER, IT IS SUBJECT TO CHANGE WITHOUT NOTICE.

QUOTATION BY:



TITLE:

Product Sales Specialist

Raymond H. McCabe

rmccabe@bahnson.com



A.1. QUOTATION / PRICING SUMMARY

Item #	b. Alternate Itemized Pricing	AMOUNT
	<p>Selections from below can be applied to the Total Cost indicated above.</p> <p>1. <u>Stainless Steel Interior:</u> BES to provide the chamber structure with a 304 stainless steel finish in lieu of embossed white galvanized.</p> <p style="text-align: right;">Additional Cost:</p>	<p>+ \$8,495.00</p>
	<p><u>Notes:</u></p> <p><i>1. Please see the Attachment for scope of work and contractual details.</i></p> <p><i>2. Please include the Referenced Quote Number and the Date of the BES Quotation within the Purchase Order / Contract to be issued to BES.</i></p>	

ADDITIONAL INFORMATION FOR QUOTATION

A.2. PAYMENT SCHEDULE AND INVOICING

INVOICING AND PAYMENT SCHEDULE:

The following invoicing and payment schedule is proposed.

20% Upon receipt of the contract.

40% Invoiced upon receipt of the approved design submittal.

40% Invoiced upon panels shipment.

10% Invoiced upon construction completion.

PAYMENT TERMS: NET 30

B. TYPE OF ROOMS (CHAMBERS)

1. ☒ New ☐ Retrofit ☐ Engineering Contract Only ☐ Demolition
☐ Dismantle & Assemble
2. Select Chamber & Quantity:
 - a. Type: Special
 - b. Quantity: (1)
3. Room Application (Product Stored) Specify: Chamber Structure Only.
4. Room Classification: Plant Growth
5. Regulation: Non GMP

C. PROJECT INFORMATION & DOCUMENTATION

1. **Brief Summary:** BES to furnish and install the chamber structure only. The door type isn't yet known and once we receive further information on the door, we can quote the additional cost as required. Mechanical and controls are not quoted at this time. Lighting not included at this time. The stairs and soil trough shown on the drawing are not in our scope.
 - a) Drawings / Layout attached: Yes
 - c) Specification attached: No
 - d) Specification Ref # No specification

ADDITIONAL INFORMATION FOR QUOTATION

2. Alternative / Optional Pricing

- a) Stainless steel interior.

D. ROOM / SITE LOCATION

- Building Type: Existing
- Number of Building Floors: (1)
- Loading Dock: Yes
- Elevator: No
- On Site Parking: Yes
- Shuttle Service Available: No
- Location of the Rooms: 1st

E. DELIVERY SCHEDULE

- Mobilization: One Time
- Schedule:
 - Submittals: (4) Weeks
 - Fabrications: (8) Weeks
 - Installation: Seven (7) working days.

F. LABOR PLAN

- Labor Plan: Non-Union MBE /WBE: No
- TSA Certification: A member of our field crew is required to TSA certification; or all of our field crew as all members of our field crew must be within eye sight if one member is certified. No
- Gowning Required: No
- Confined Space: No
- Fire Watch Required: No
- Work Hours: Normal

- ❖ *Project Submittal issued by BES for approval **within (3) weeks** after receiving the Contract or Purchase Order.*
- ❖ *Materials on site **within (8) weeks** after receiving the **approved project submittal.***

ADDITIONAL INFORMATION FOR QUOTATION

- ❖ Installation completion is approximately 7 day's from delivery.
- ❖ Project Installation is based on (1) time mobilization.

G. SCOPE OF WORK / PRODUCT OUTLINE

1. Room Schedule:

TABLE 1

Room #	Temp (°F)	Temp VTU	Relative Humidity (% RH +/- VARIATION) Maximum: Y/N	Type of Dehumidification DX - DEH / DA / or DESICCANT	Make-up Air (CFM)	Classification Clean / XP Specify	Floor Location 1 ST / 2 ND / 3 RD / 4 TH / Slab on Grade	Refrigeration Pipe Run Horiz. / Vert.
1	TBD		TBD			N/A	1 st Floor	TBD

2. Basis of Design:

- Ambient Surroundings (all sides of chamber): 60°F to 75°F, 65% RH to 75% RH.

3. Architectural Structure:

- Suggested Panel Supplier: TBD
- Room Dimensions: ☐ Standard ☒ Custom

TABLE 2

<u>Room #</u>	<u>Exterior Size</u> W x D x H (OD)	<u>Interior Size</u> W x D x H (ID)	<u>Clear Interior Height Required</u>	<u>Shared Common Wall</u> (Yes/ No)	<u>Anteroom Required</u> (Yes / No)	<u>Anteroom L x W x H (OD) if applicable</u>
	17'-5" x 17'-5" x 23'-10"	16'-7" x 16'-7" x 23'-5"	23'-5"	No	No	No

- Factory Mutual (FM 4880): Panels only
☐ YES ☒ NO
- Factory Mutual (FM 4880): with Installation:
☐ YES ☒ NO
- Seismic Requirement: If yes, specify: Choose an item.
☐ YES ☒ NO
- PE Stamp:
☐ YES ☒ NO

ADDITIONAL INFORMATION FOR QUOTATION

- Extended Warranty:
☐ YES ☒ NO
- Roof Panel Suspension Method: Self Supporting
- Roof Panel Loading: Standard 7-10 lbs / Sq Ft
- Special Cleaning Agents: ☐ YES ☒ NO
- Internal Panel Finishes: Embossed White Galvanized
- External Panel Finishes: Embossed White Galvanized
- Panel Thickness:
 - Wall: ☐ 2" ☐ 4" ☒ 5" ☐ 6"
 - Roof: ☐ 2" ☐ 4" ☒ 5" ☐ 6"
 - Floor: ☐ 2" ☐ 4" ☐ 5" ☐ 6" ☒ No Floor Panel
 - Floor Depression: No
 - Flat Bottom Wall Panels: Yes
 - Ramps: No

Special Notes for Structure and Floors:

- ❖ *Self-supporting chamber. Additional support from the existing building is not required.*
- ❖ *Existing Floor: Floor leveling to BES specifications shall be by others: 1/4" in 10'-0", 1/8" in 2'-0".*
- Doors: Door type not specified at this time.
 - Door Schedule: No
- Suspended Ceiling Grid: None
- Ceiling Tiles: None
 - Pass Through: No
 - Tapping Plates: No
 - Bumpers: No
 - Ladders: No
 - Wall Panel View Ports: None
 - Roof Hatch: No

ADDITIONAL INFORMATION FOR QUOTATION

- Protection Railing: No
- Corner Guards: No
- Test Ports: No
- Tri Clamps: No
- Shelving: No

4. Mechanical / Air Distribution:

- Not included at this time.

5. Controls:

- Not included at this time.

6. Electrical System :

- Not included at this time.
- Lighting not included at this time.

7. Turn - Over Documentation:

- Engineering Submittal: Standard

Special Note for Documentation

BES standard documentation package is provided as described below. Engineering Submittal

- ❖ *GA (Dimensioned General Arrangement drawings). These drawings typically show the overall chamber layout. Major component cut sheets. Submittal document which states chamber dimensions, warranty statement and proposed project schedule.*

8. Commercials:

- Equipment Rental: By BES.
- Tax: Excluded
- Standard Warranty: Yes - (1) Year Materials and Labor
- Extended Insulated Panel Warranty - Additional (9) years materials only for the chamber structure: By BES.
- OSHA: By BES
- CPR/ First Aid Training: By BES.
- Fall Protection Training: By BES.

ADDITIONAL INFORMATION FOR QUOTATION

- Drug Testing: By BES.

9. **Preliminary Utility Requirements:**

❖ *Preliminary Utilities are subject to change upon final Engineering.*

- a) **Electric Power Feeds - Voltage/Phase/Cycle - Within 5' of Each Equipment - by GC / Owner:**
 - Not Applicable.
- b) **Air Flow & Ductwork for Each Dehumidification Unit & Condensing Unit provided by GC / Owner:**
 - Not Applicable.
- c) **Water Flow Feed & Piping – provided within 5' of each Humidifier & Condensing Unit by GC / Owner:**
 - **Humidifier:** RO / DI water supply with piping for steam generators. Not Applicable.
 - **Condensing Unit:** Chilled / Tower water supply and return. Not Applicable.
- d) **Compressed Air Feed & Piping – Within 5' of Each BES Valve Rack by GC / Owner:**
 - Not Applicable.
- e) **Service Area and Equipment Weights**
 - Condensing unit foot print / weight: Not Applicable.
 - Dehumidifier foot print / weight: Not Applicable.

H. CLARIFICATIONS, DEVIATIONS, QUALIFICATION & BID RESPONSE

Suggested Qualifiers:

- Soil trough furnished and installed by others.
- Stairs to be furnished and installed by others.
- Door(s) not provided at this time. BES to provide the additional cost upon receipt of door details for loading and unloading tree products.

ADDITIONAL INFORMATION FOR QUOTATION

I. RETROFIT CLARIFICATIONS

NOT APPLICABLE

K. RELATED WORK PERFORMED BY OTHERS / OWNER/ GENERAL CONTRACTOR:

1. MECHANICAL

- Designed, furnished and installed by others.

2. ELECTRICAL:

- Designed, furnished and installed by others.

3. ACCESSORIES:

- None.

L. LABOR CONDITIONS:

- Quoted price does not include permits and licenses.
- Non-union installation shall be performed by BES.

M. SITE CONDITIONS

- All building openings required to bring oversized materials into the building shall be provided by others.
- All service platforms, guardrails, or OSHA/Owner safety railings for the mechanical area shall be provided by others.
- BES shall not be responsible for building alterations.
- Insulated floor panels are not provided for this chamber structure. The existing structure shall be utilized as the chamber floor.
- BES recommends a 2½" deep x ¼" wide saw-cut for thermal break be provided under the chamber wall panels to stop thermal migration from the chamber interior to its exterior. Sweating of the concrete floor exterior to the chamber can occur over time if a thermal break is not provided.
- All required floor design, slab insulations, floor slabs, vapor barriers, concrete leveling, under slab sprayings, slab cuts or epoxy floor coating to prevent condensation shall be performed by others.

ADDITIONAL INFORMATION FOR QUOTATION

- Floor leveling to BES specifications shall be by others: ¼" in 10'-0", ⅛" in 2'-0".
- Quoted price does not include P.E. stamped drawings. If this is a requirement, please advise.

N. TERMS OF AGREEMENT:

- Quoted price includes project submittal, drawings and turnover documentation furnished electronically only. For documentation in hard copy/binder format, additional costs apply.
- Complete chamber design, engineering and project management by BES.
- Price is quoted with one complete cleaning of product furnished under contract with BES. Additional cleaning or damages due to other trades' work will result in a change order.
- Prices quoted do not include federal, state or local taxes. Please forward Tax Exemption Form if applicable otherwise tax must be calculated and added by BES.
- Quoted price does not include a phased installation, unless otherwise noted. Remobilization costs must be added if a phased installation, project start-up or performance test is required. Upon receipt of the required schedule, BES to provide a possible cost adjustment.
- Quoted price does not include provisions for working in a gownned environment, unless otherwise noted.
- Upon receipt and review of project related Specifications, General Conditions, required documents and drawings not at BES at time of estimate and proposal, BES to provide a possible cost adjustment.
- Quotation includes complete material package as specified in attached Project Outline.
- BES has received no addenda. If addenda are applicable to this scope of work, BES reserves the right to provide a revised quotation based on this information.
- Spare parts costs not included in the pricing presented. Upon receipt of the approved project submittal, BES to present required pricing if requested from the client.
- Factory assembly of the chamber as a unit prior to shipment of product is not included.
- Overtime has not been estimated for this project and would be a cost addition if required due to compressed schedules or delays not caused by BES.
- Quoted price does not include temporary partitions.
- Labor, performance and payment or bid bond not included in the pricing presented. BES can provide upon request.
- All dollar amounts are now and/or in future correspondence, will be in U.S. currency.

ADDITIONAL INFORMATION FOR QUOTATION

O. CONDITIONS OF AGREEMENT:

- The prices and terms on this quotation are not subject to verbal changes or other agreements unless approved in writing by the Home Office of the Seller. All quotations and agreements are contingent upon strikes, accidents, fires, availability of materials and all other causes beyond our control.
- Typographical and stenographic errors subject to correction. Purchaser assumes liability for patent and copyright infringement when goods are made to Purchaser's specifications. When quotation specifies material to be furnished by the purchaser, ample allowance must be of suitable quality to facilitate efficient production.
- Conditions not specifically stated herein shall be governed by established trade customs. Terms inconsistent with those stated herein, which may appear on Purchaser's formal order, will not be binding on the Seller.