

Cleanroom Design

Thank you for requesting our Cleanroom Design Data Form.

Our approach to the market is as a partner directly with the end user of the Cleanroom. This allows us to design a facility that will meet the operational requirements of the owner. We are a Design / Build and Maintain Full Service Contractor. We would consult with you to fully understand your requirements and budget. After this consultation we would offer a complete turnkey package, including:

1. Provide a design, with various options, their benefits, and cost comparison.
2. Complete construction and management, including contractor protocol training,
3. Commissioning, including all applicable testing as per ISO 14644
4. Protocol training for staff, including suggestions for gowning, cleaning and Cleanroom use, and budget cost estimates for these items.
5. Provide ongoing maintenance and support, and guarantee conformance to the requirements.

The successful Cleanroom starts with the design and planning process. Our initial on site consultation is offered at no cost or obligation. The earlier we can come on board with the team, the easier it is for us to assist in design tuning that may save initial or operational cost.

We have prepared this to assist us in having a complete understanding of your existing facility, and the conditions under which the construction will take place. Please feel free to contact our office, and we can send you instructions on how to complete the Cleanroom Design Forms.

We look forward to working with you.

Vernon Solomon, President



122F Commerce Park Drive, Barrie, ON L4N 9A8, Canada
Phone: 705 797 8877 / Toll Free: 1 866 565 7055
Email: info@e-s-c.com

Cleanroom Design Data

Date:

Project Name:

Project Coordinator:

Decision Maker:

Company:

Address:

Phone #

Fax #

Email:

Are Drawings Available ?	No	Yes	AutoCAD or ReVIT Format
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Date Proposal Required:

Desired Completion Date:



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Cleanroom Design Data

Required Cleanroom Conditions

	Room #	Room #
Name:		
Dimensions:		
Cleanliness Class:		
Temperature Set Point:		
Temperature Range:		
Humidity Set Point:		
Humidity Range:		
Exhaust Required:		
Total Process Equipment Heat Load: (kW, HP, or BTUH)		
Maximum Number of People:		
Other Latent Heat Sources:		
Required Ceiling Height:		
Sprinkler Protection Required:		
Other Fire Protection Required:		
Lighting Level:		
Pressure Difference to Ambient:		
Toxic Gas Use:		



Cleanroom Design Data

Site Data

Demolition Required?

Concrete or Steel Joist Structure?

Clear Height from Floor to Bottom of Joists:

Joist Depth	Spacing	Alignment	N/S or E/W
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Roof Membrane Material	Tar & Gravel	Rubber Membrane	Steel
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Condition of Existing Roof	Age	
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Contractor for Roof Warranty

Cleanroom(s) to be Self Supporting:

Building Interior Peak Ambient Temperature	Summer (High)	Winter(Low)
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Building Peak Ambient Humidity	Summer(High)	Winter(Low)
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Make Up Air to be taken from:	Building Ambient		Outdoors
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Preferred Air Conditioning Heat Rejection Equipment Location:	Inside the Building	Roof	Adjacent to Building
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HVAC Equipment Hoisting	Distance Up		Distance In from Roof Edge		Distance Out from Wall to Crane
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Loading Dock	Height From Ground		Clear Opening Size
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Drive In Door	Clear Opening Size
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Overhead Crane Available	Max Weight		Max Height	
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Fork Lift Available	Max Weight		Max Height	
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Is there additional area outside the Cleanroom Envelope for material staging?

Unit of Measure for Temperature Display		°C		°F
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Additional Notes:



Cleanroom Design Data

Available Utilities

Chilled Water	Yes	No	
Temperature	GPM	Line Size	Pressure
Condenser Water	Yes	No	
Temperature	GPM	Line Size	Pressure
Hot Water	Yes	No	
Temperature	GPM	Line Size	Pressure
Steam	Yes	No	
# / Hour Available		Line Size	Pressure
Compressed Air	Yes	No	
	CFH	Line Size	Pressure
Natural Gas	Yes	No	
	CFH	Line Size	Pressure
Domestic Water	Yes	No	
	GPM	Line Size	Pressure
Electrical Power	Voltage	Amperage	3 or 4 Wire
Existing Panels MFG & Model #		Panels Required Distance to Main Distribution	
Building Drainage	Yes	No	
	GPM	Line Size	
Sprinkler System	Yes	No	
	GPM	Line Size	Pressure
DI or RO Water	Yes	No	
Purity	GPM	Line Size	Pressure



Process Equipment Data Sheet

Customer Name: _____

Project Name : _____

Project Number: _____

Date: _____

Equipment Name: _____

Manufacturer: _____

Model Number: _____

I.D. or Serial Number: _____

Location (Room or Zone): _____

Equipment Heat Load to Room: _____

Btu/hr

Are the peak loads and running loads different? For example: What is the amp draw or gpm of the equipment as it comes up or down to operating temperature as opposed to the amp draw or gpm once operational? If these are different for any of the services please place peak load first and running load separated by a slash.
Example: 20/4 gpm

1. Electrical Power:

Disconnect Required: Yes No

Voltage/Phase: _____

Amperage: _____

Plug In Req'd

Electrical Source required: Normal Emergency UPS

Are there electrical panels or displays to be remote mounted from unit? Is there special grounding to be used or is an electrical starter required? If so please add details in the note section.

2. Exhaust Air:

Duct Size _____

CFM @ _____

" WC SP _____

Flammable Solvent Acid Toxic

Dusts Powders HEPA Containment

Other please detail: _____

Max Temp: Deg. F Deg. C

3. Supply Air:

Duct Size _____

CFM @ _____

" WC SP _____

Normal HEPA ULPA

Deg. F Deg. C Max Temp: _____ Min Temp: _____

Max RH: _____ Min RH: _____

4. Plant Steam:	Lbs/hr@	PSI	Pipe Size:	Type:
5. Condensate Return:	Lbs/hr @	PSI	Pipe Size:	Type:
6. Clean Steam:	Lbs/hr @	PSI	Pipe Size:	Type:
7. Compressed Air:	CFM	PSI	Pipe Size:	Type:
8. Medical Air:	CFM	PSI	Pipe Size:	Type:
9. Nitrogen:	CFM	PSI	Pipe Size:	Type:
10. Other Gas:	CFM	PSI	Pipe Size:	Type:
11. Process Vacuum:	CFM	In.Hg.	Pipe Size:	Type:
12. House Vacuum:	CFM	" WC	Pipe Size:	Type:

The following GPMs are in: U.S. Imperial

13. Chilled Water or Glycol:	Pipe Size:	Type:
<input type="checkbox"/> Deg. F <input type="checkbox"/> Deg. C	Max Temp:	Min Temp:

BTU or Temp Rise: _____ GPM: _____ Pressure: _____

14. Boiler Water:	Pipe Size:	Type:
<input type="checkbox"/> Deg. F <input type="checkbox"/> Deg. C	Max Temp:	Min Temp:

BTU or Temp Rise: _____ GPM: _____ Pressure: _____

15. Hot Domestic Water:	GPM	Pipe Size:	Type:
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16. Cold Domestic Water:	GPM	Pipe Size:	Type:
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17. Domestic Drain:	GPM	Pipe Size:	Type:
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18. D.I. / R.O. Water	GPM	Pipe Size:	Type:
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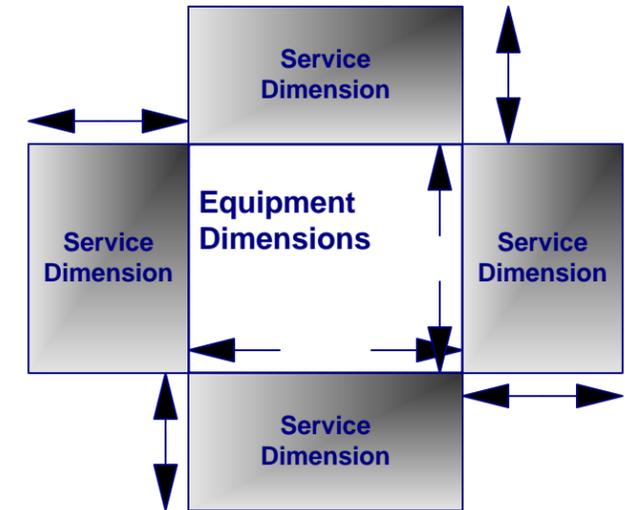
Quality: _____ Usage _____

19. Water for Injection (WFI)	GPM	Pipe Size:	Type:
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20. Purified Water (PW)	GPM	Pipe Size:	Type:
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21. Other	GPM	Pipe Size:	Type:
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Please state what the measurement units are in the box:



Front of Equipment or Loading End

Place the corresponding service number on the appropriate side that the service enters the equipment. Example: Place a (1) on the rear of the equipment if the electrical connector is at the back of the unit.

Are there any special requirements such as pressure relief valves or venting pipes required? If so please add details in the Notes section.

Equipment Height: _____

Service Height: _____

Notes: