



CLEAN ZONE GENERAL REQUIREMENTS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this section to the extent referenced. The publications are referred to within the text by the basic designation only.

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)

ISO 14644-1 (2015) Cleanrooms and Associated Controlled Environments Part 1: Classification of Air Cleanliness

1.2 SUMMARY

- a. This section specifies the general requirements for persons who perform work or function within the Clean Zone.
- b. The objective of this section is to provide a controlled clean environment within which mechanical, electrical, cleanroom systems, and process piping will be installed:
 - 1. Maintain a clean environment from the initial construction stage through final cleanroom certification.
 - 2. Clean products brought into the Clean Zone meeting minimum cleanliness standards on both interior and exterior surfaces.
 - 3. Establish and monitor personnel cleanliness levels and construction protocol standards for each construction stage.
 - 4. Enforce active contamination controls consistent with each construction stage.
 - 5. Monitor required level of cleanliness using spot checks at prescribed locations.
- c. Section Includes:
 - 1. Boundaries.
 - 2. Standards.
 - 3. Definitions.
 - 4. General Clean Zone Procedures.



- 5. Construction Stage.
- 6. Training and Security.
- 7. Garments.
- 8. Clean Zone Entry Requirements.
- 9. Delivery, Storage, and Handling.
 - (a) Delivery.
 - (b) Storage.
 - (c) Handling.

1.3 BOUNDARIES

a. The Clean Zone is defined as the building area bounded by the following grids: ★=User Defined Data

- 1. Level 01 (★).
- 2. Level 02 (★).
- 3. ★ Level:
- 4. Level 03 (Fandock ★).

To follow prudent construction protocol for semiconductor research and development facilities, the requirements of Section 1.10 a apply to the ★ and ★ except where indicated.

Section 1.10 b describes requirements for boot covers in the ★ and ★ levels.

Section 1.11 describes requirements for walk-off mats and tacky mats at entrances to the ★ and ★ Levels.

The other paragraphs and tables within this specification section do not apply to the ★ Level and ★ Level areas defined above.

b. The Cleanrooms are defined as the building areas bounded by the following grid:

- 1. Level ★

1.4 STANDARDS

ISO 14644-1: Cleanrooms and Associated Controlled Environments - Part 1: Classification of Air Cleanliness.



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1.5 ADMINISTRATIVE REQUIREMENTS

- a. Refer to Standard ISO 14644-1 for a complete list of definitions appropriate to cleanrooms. Specific words and phrases used within these Contract Documents are defined below for easy reference.
- b. **As-Built Cleanroom:** Cleanroom which is complete and ready for operation with services connected and functional, but without production equipment or personnel within the room.
- c. **At-Rest Cleanroom:** Cleanroom which is complete and has production equipment installed and operating, but without personnel within the room.
- d. **Test and Balancing Contractor:** The air and water systems testing, adjusting, and balancing contractor (TABCO) retained by the Contractor to assist and verify completion and performance of the operating systems.
- e. **Base Build:** This is the project where the CSL-MIF facility is constructed, including site elements, structure, architecture, cleanroom, mechanical, electrical, process, plumbing, controls, telecom, fire alarm, fire protection, security systems and other facility elements included in the Construction Documents. The Base Build project does not include the Tool Install scope, which consists of the installation of Tools throughout the cleanroom and as well as the mechanical, electrical, process, and other connections to those tools.
- f. **Cleanroom Certification Contractor:** The cleanroom testing and certifying contractor (CCC) retained by Contractor to assist and verify final completion and performance of the cleanroom systems.
- g. **Classes of Cleanliness:** Statistically allowable number of particles of a given size per cubic meter of air.
- h. **Cleanroom:** A defined clean area or room in which the concentration of airborne particles is controlled to specified limits. For this project, the cleanroom is the space bounded by the cleanroom structural floor slab below, the cleanroom filtered ceiling grid above, and the perimeter cleanroom walls, including spaces, products, and utilities within.
- i. **Clean Zone:** A defined clean area in which the concentration of airborne particles is controlled to specified limits. The Clean Zone is the building space described above, in the paragraph Clean Zone Boundaries, bounded by the floor slab below, the deck membrane above, and the perimeter fire, separation, and boundary walls, which encompass cleanrooms of any cleanliness classification, as well as any remote special rooms for cleanroom support equipment, including spaces, products, and utilities within.
- j. **Clean Zone Construction Stage:** See Stage.



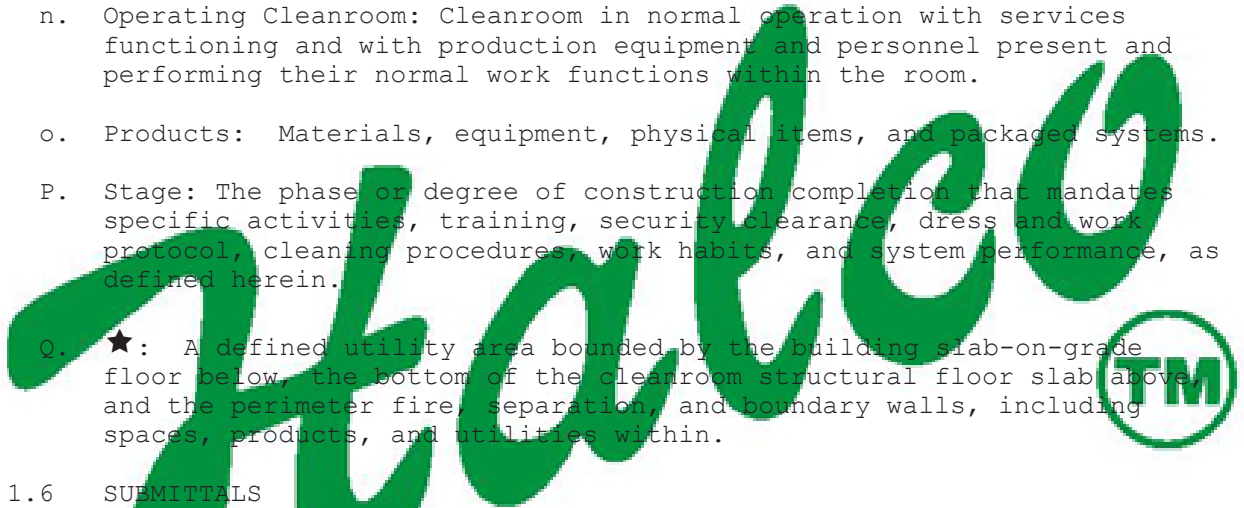
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- k. Clean Zone Director: The person, hereinafter referred to as the Director, vested with authority by the Contractor to supervise personnel working within the Clean Zone and to ensure requirements of the Contract Documents are met in completion of the Clean Zone construction, including spaces, products, and utilities within.
- l. Interstitial: A defined clean area bounded by the plane of the cleanroom filtered ceiling below, the bottom of the building ★ Level structural deck above, and the perimeter fire, separation, and boundary walls, including spaces, products, and utilities within.
- m. Office Clean: A standard of cleanliness commonly maintained in finished commercial office spaces with no visible residues of dirt, dust, oil, grease, or debris on the floor, walls, or workstations as normally achieved by cleaning, wiping, and vacuuming.
- n. Operating Cleanroom: Cleanroom in normal operation with services functioning and with production equipment and personnel present and performing their normal work functions within the room.
- o. Products: Materials, equipment, physical items, and packaged systems.
- p. Stage: The phase or degree of construction completion that mandates specific activities, training, security clearance, dress and work protocol, cleaning procedures, work habits, and system performance, as defined herein.
- q. ★: A defined utility area bounded by the building slab-on-grade floor below, the bottom of the cleanroom structural floor slab above, and the perimeter fire, separation, and boundary walls, including spaces, products, and utilities within.



1.6 SUBMITTALS

Architect approval is required for submittals with an "A" designation; submittals not having an "A" designation are for information only. When used, a designation following the "A" designation identifies the office that will review the submittal for the Architect. Submittals with an "S" are for inclusion in the Sustainability eNotebook, in conformance to Section 01 33 29 SUSTAINABILITY REPORTING. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES.

SD-01 Preconstruction Submittals

Compliance Matrix; A, AE

Cleanroom Construction Contractor Experience; A, AE

1.7 GENERAL CLEAN ZONE CONSTRUCTION PROCEDURES

- a. The following activities are prohibited inside the Clean Zone at any Stage:



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1. Eating or drinking foodstuffs.
 2. Smoking of cigarettes, cigars, or pipes.
 3. Spitting.
 4. Standing, walking, or sitting on electrical conduit and bus duct, HVAC ductwork, fire sprinkler piping, or other building utility piping.
 5. Standing, walking, or sitting on process high-purity or double-contained specialty gas piping.
 6. Standing, walking, or sitting on ceiling cleanroom filter modules or packaged ceiling modules, whether boxed in storage or installed in the ceiling grid (not applicable to Subfab and Fandeck levels).
 7. Breaking open any clean products specially sealed and wrapped for protection until the product is installed.
 8. Cutting, threading, soldering, grinding, or welding pipe, conduit, bus duct, or fittings, after completion of Stage 1 activities (not applicable to Subfab and Fandeck levels).
 9. Operating any propane, acetylene, diesel, gas, or oil-fueled tool, high-lift, or other construction equipment.
 10. Applying or spilling oil, stain, paint, sealant, caulking, or other diffusing product onto the structural floor before application of specified sealers and paints.
 11. Entering or working inside the Clean Zone in garments and footwear that are not in compliance with written Clean Zone cleanliness protocol posted for the construction stage (not applicable to Subfab and Fandeck levels).
 12. Entering or working inside the Clean Zone without badge clearance posted for the construction stage (not applicable to Subfab and Fandeck levels).
- b. Mandatory procedures for persons entering and working in the Clean Zone in Stages 3 through 5:
1. Clean footwear with electric foot scrubber at entry to gowning area.
 2. Walk on all sections of tacky mat provided at entry to the Clean Zone.
 3. Wipe down or vacuum off construction materials, tools, and accessories.
 4. Wipe up spills of caulking, sealant, filter gel, paint, and similar products immediately.



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5. Dispose of tie-straps, plastic seal wraps, and other product-protecting devices in trash receptacles.
 6. Enclose and contain bits of construction debris, such as nuts, washers, wire-cut ends, insulation scraps, metal trimmings, and similar products from falling beyond the work zone into interstitial or under floor cavities.
 7. Wear garments and accessories as instructed and advise any worker who is not properly attired. Notify the Director of any person improperly attired.
 8. Provide continuous 99.99 percent efficient at most penetrating particle size HEPA-filtered vacuum pickup during drilling, coring, cutting, or similar particle-generating work activities after construction Stage 2.
 9. Provide construction tools that are cleaned, stored, and used only within the designated Clean Zone after construction Stage 2.
 10. Attend jobsite safety training classes conducted by the Contractor.
 11. Follow safety rules as taught in the Contractor's safety class and follow normal safety discipline enforced by each employer as standard procedure for the trade, worker experience, and type of work required.
 12. Complete the hazardous production materials (HPM) safety training sessions conducted by the Contractor.
- c. Security Procedures:
1. Display color-coded security badges and company identification inside the site perimeter boundary as established by the Contractor.
 2. Clean Zone Entrance Requirements:
 - (a) Limited to persons with Clean Zone badges.
 - (b) Visitors:
 - 1) Accompanied by an Owner's representative.
 - 2) Check in with the Director prior to entry into the Clean Zone.
 3. Respect temporary locks installed at entry points to restrict entry but permit safe exit.
- d. Disciplinary Procedure:
1. The Contractor or Director will remove:
 - (a) Persons performing a prohibited activity immediately from the jobsite.



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- (b) Persons not following the mandatory procedures immediately from the jobsite.
- (c) Persons without proper badge clearance for a posted controlled area immediately from the jobsite.

2. Prohibit repeat violators from entering the jobsite.

1.8 CONSTRUCTION STAGE ACTIVITIES

The activities shown in Table 1 - Construction Stage Activities are a listing of major tasks in construction of the cleanroom. The table is not inclusive of all required activities, and the sequencing of construction work shown within each stage shall be determined by Contractor.

TABLE 1 - Construction Stage Activities					
Description	Stage				
	1	2	3	4	5
Initial grading and utility site work.	S	F			
Site utility work complete.	X				
Building structure, shell, and roof complete.	X				

TABLE 1 - Construction Stage Activities					
Description	Stage				
	1	2	3	4	5
Concrete floor finished and cured.	X				
Mechanical, electrical, plumbing and process systems involving grinding, welding, cutting or other process of metallic products including but not limited to piping and duct systems.	X				
Insulation of mechanical, plumbing and process systems.	X				
Makeup Air Handlers installed.	X				
Equipment rooms enclosed with access openings.	X				



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Building structural fireproofing complete (where applicable).	X				
Building shell enclosed.	F				
Concrete floor and preparation complete.		X			
Concrete floor sealed and cured.		X			
Clean Zone perimeter walls complete.		X			
Clean Zone perimeter walls sealed, painted, and dried.		X			
Fire barriers complete.		X			
Upper zones of fire protection complete.		X			
Building envelope airtight.		X			
Recirculation Air Handlers installed.		X			
Mechanical, electrical, plumbing and process systems complete, except for ceiling grid, cleanroom walls, and access flooring.		X			

TABLE 1 - Construction Stage Activities

Description	Stage				
	1	2	3	4	5
Clean Zone perimeter boundary enclosed.		F			
Fab Makeup Air Handler Blowdown (Environmental Control)			1S		
Raised floor complete and level.			X		
Laminate floor material laid and sealed.			X		
Protective temporary floor cover complete.			X		
Ceiling assembly complete and level.			X		
Perimeter Clean Zone glazing complete.			X		



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Interior walls erected.			X		
Doors installed and operable.			X		
Floor, ceiling, and walls complete.			X		
Fire sprinkler system installed and tested.			X		
Permanent lighting complete and operable.			X		
Smoke detectors installed and tested.			X		
Recirculation ductwork complete and tested.			X		
Recirculation air handlers operating in manual after intermediate cleaning procedures have been completed			X		
Makeup air ductwork complete and tested.			X		
Control devices complete.			X		
Housekeeping vacuum system complete, operable, and tested.			X		
Contamination levels stabilized at a level that the Clean Zone Director deems satisfactory.			X		
Cleanroom walls, floors, and ceiling assembly completed.			F		

TABLE 1 - Construction Stage Activities

Description	Stage				
	1	2	3	4	5
Fire sprinkler system charged and operable.				X	
Smoke detectors operable.				X	
Recirculation air system operable and adjusted.				X	
Makeup air system operable and adjusted.				X	



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Control devices operable and tested.				X	
Safety systems installed and tested.				X	
Protective covers removed from floor, ceiling and walls.				X	
Ceiling grid filled with gel sealant.				X	
Contamination levels stabilized at a level that the Clean Zone Director deems satisfactory.				X	
Ceiling cleanroom filters installed.				X	
Final cleaning finished inside the cleanroom.				F	
Control systems tested and calibrated.					X
Air systems tested and balanced.					X
Certification completed.					X
Contamination levels stabilized at levels required by project design.					X
Final cleanroom certification report submitted and approved.					X
¹ S - Start activity of construction stage (Base Build project). F - Finish activity of construction stage (Base Build project). X - activity occurring during construction stage (Base Build project).					

1.9 TRAINING AND SECURITY

a. Badge Requirements:

1. Employee name.
2. Employer company name.
3. Color as defined in Table 2.

b. Hazardous Material Safety Training:

1. Special Safety Classes: 2 hours duration, by the Contractor to familiarize workers with hazardous gases, chemicals, products, and



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fluids referred to as hazardous production materials (HPM) to be found on the site during this stage of construction.

2. Customer Specific Training: Additional training on HPM may be required by customer, especially if the Tool Install phase overlaps with the Base Build project. Assume, for bid purposes, that another 2 hours of training will be required for customer specific requirements. This training will be conducted by customer or its designee.
3. Testing: Workers to pass the written safety test, which includes emergency alarm recognition.
4. Evacuation: Workers required to demonstrate safe emergency evacuation.
5. Required: As defined for workers in Table 2.

TABLE 2 - Training and Security Requirements

Description	Stage				
	1	2	3	4	5
Protocol Training: By Director ⁶	None	X ^{1, 2, 3}	X ^{1, 2, 3}	X ^{1, 2, 3}	X ^{1, 2, 3}
Construction Safety Training					
Safety Classes: By each employer for safe performance of work.	X	X	X	X	X ⁵
Job Site Safety Classes: By the Contractor	X	X	X	X	X ⁵
Hazardous Material Safety Training.	N/A	N/A	X ^{1, 2,}	X ^{1, 2}	X ^{1, 2}
Badging					
Badge Color - Protocol	Black	Gray	Blue	Green	Owner ⁴



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Badge Color - HPM Safety Color Code			Yellow	Red	Owner ⁴
¹ Mandatory for workers entering the clean zone. ² Workers must pass written test. ³ Duration of Training: 2 hours, except for Stage 5 that is 1 hour. ⁴ Owner standard color. ⁵ No additional training required. ⁶ Training sessions developed and reviewed with the Contracting Officer.					

1.10 GARMENT

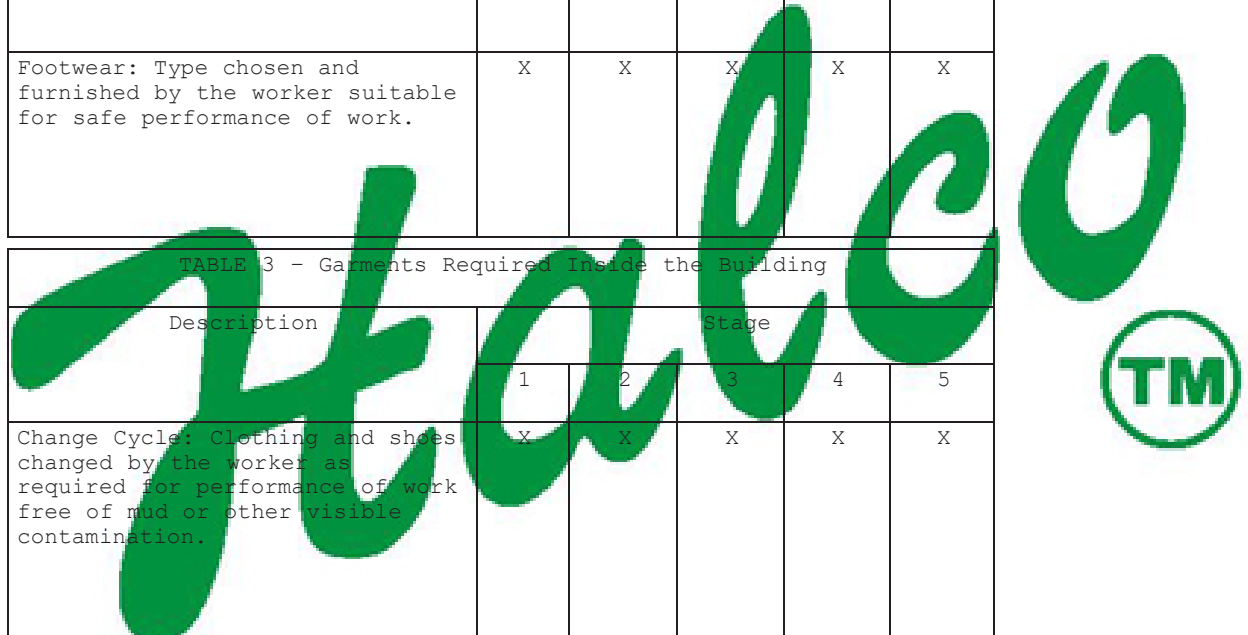
- a. Type of garments to be worn is differentiated between what is required inside the building, inside the clean zone and inside the cleanroom. Table 3 outlines the required garments for inside the building and Table 4 outlines the required garments for inside the clean zone and cleanroom.
- b. Boot Covers for ★ and ★ Levels: boot covers are required to be worn by contractors, vendors, and other visitors in the ★ and ★ Levels prior to the beginning of construction for mechanical, electrical, process, and plumbing systems in these spaces. These boot covers must be worn throughout the duration of construction, commissioning, and closeout.
- b. Smocks and Work Suits:
 - 1. Disposable Clean-Work Garments:
 - a) Furnished by the Contractor for persons inside the Clean Zone.
 - b) Smock: One-piece, smock jacket with full-length sleeves, front closure, and badge pocket.
 - c) Work Suit: One-piece, step-in, zip up nonshed Tyvek paper with full-length legs, full-length sleeves, front zipper, elastic straps at wrist and ankle, and badge pocket.
 - 2. Cleanroom Garment: One-piece, step-in, zip up work suit of nonshed gabardine, nylon, or rayon, with full-length legs, full-length sleeves, front zipper, elastic straps at wrist and ankle, badge pocket, and utility pockets as required for safe performance of work.
 - 3. Color Choice: By Contractor.
 - 4. Outer Garments for Visitors: Furnished by the Owner.



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TABLE 3 - Garments Required Inside the Building					
Description	Stage				
	1	2	3	4	5
Clothing: Type chosen and furnished by the worker suitable for performance of work.	X	X	X	X	X
Headgear: Hardhat furnished by the employer as required to protect workers for overhead hazards.	X	X	X	X	X
Footwear: Type chosen and furnished by the worker suitable for safe performance of work.	X	X	X	X	X

TABLE 3 - Garments Required Inside the Building					
Description	Stage				
	1	2	3	4	5
Change Cycle: Clothing and shoes changed by the worker as required for performance of work free of mud or other visible contamination.	X	X	X	X	X
Laundry Criteria: Laundered by the worker. Clothing must be in a good condition and free of visible contamination.	X	X	X	X	X
Personal Hygiene: Responsibility of the worker.	X	X	X	X	X





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TABLE 4 - Garments Required Inside the Clean Zone and Cleanroom

Description	Stage						
	1	2	3	4 CZ	4 CR	5 CZ	5 CR
Clothing							
Normal or Inner if under worksuit: type chosen and furnished by the worker suitable for performance of work.	X	X	X	X	X	X	X
Cleanroom Garment:					X		X
Disposable Outer Work Suit:							
Disposable Smock:			X	X		X	
Headgear:							
Hardhat furnished by the employer.	X	X	X	X		X	

TABLE 4 - Garments Required Inside the Clean Zone and Cleanroom

Description	Stage						
	1	2	3	4 CZ	4 CR	5 CZ	5 CR
Non-shed pull-over style with crown, shoulder flaps, and face mask for full eyes-only face coverage, furnished by the Contractor.					X		X
Hair Cover: Disposable bouffant style with elastic band for full hair coverage, furnished by the Contractor for persons inside the Clean Zone, worn next to the hair under the hardhat.			X	X		X	
Mustache/Beard Covers: Disposable foam style furnished by the Contractor for workers and visitors with facial hair.			X	X		X	



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Mustache/Beard Masks: Disposable pleated polyester style with elastic straps, furnished by the Contractor for persons with facial hair.					X		X
Full Wrap-Around Safety Goggles: Furnished by the Contractor for visitors only.			X	X	X	X	X
Gloves							
Non-shed nylon or vinyl, furnished by the Contractor.			X	X	X	X	X
Footwear							

TABLE 4 - Garments Required Inside the Clean Zone and Cleanroom

Description	Stage							
	1	2	3	4 CZ	4 CR	5 CZ	5 CR	
Type chosen and furnished by the worker suitable for safe performance of work.	X	X						
Shoes: Soft-soled, nonscuff, tennis-style sportswear chosen and furnished by the worker.			X	X	X	X	X	
Disposable polypropylene slip-on shoe covers with elastic top for persons who wear special footwear, furnished by the Contractor			X	X		X		
Outer Shoe Covers: Slip-on knee-high shoe covers with elastic top and ties and protected static-dissipative walking sole, furnished by the Contractor.					X		X	
Change Cycle								
Normal or Inner: Clothing and shoes changed by the worker as required for performance of work.	X	X	X	X	X	X	X	
Cleanroom Garments, Headgear, and Shoe Covers: Collected by the Contractor twice weekly for laundry and reuse.					X		X	



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Disposable Work Suits: Collected by the employer weekly for disposal.			X	X		X	
Disposable Slip-on Shoe Covers: Collected by the Contractor weekly for disposal.			X	X		X	

TABLE 4 - Garments Required Inside the Clean Zone and Cleanroom

Description	Stage						
	1	2	3	4 CZ	4 CR	5 CZ	5 CR
Disposable Hair Covers and Mustache/Beard Covers: Collected by the Contractor weekly for disposal.			X	X		X	
Disposable Mustache/Beard Covers: Collected by the Contractor twice weekly for disposal.					X		X
Repair or replace immediately, work suits, headgear, and shoe covers with tears or holes.			X	X		X	
Laundry Criteria ¹							
Normal or Inner: Laundered by the worker.	X	X	X	X	X	X	X
Cleanroom Garments, Headgear, Shoe Covers, and Gloves: Replaced and laundered by the Contractor twice weekly, issued on Monday and Thursday.					X		X
Disposable Work Suits, Hair Covers, Mustache/Beard Covers, Slip-On Shoe Covers, and Gloves: Replaced by the Contractor weekly, issued on Monday.			X	X		X	
Disposable Mustache/Beard Covers: Replaced by the Contractor twice weekly, issued on Monday and Thursday.					X		X
Personal Hygiene							

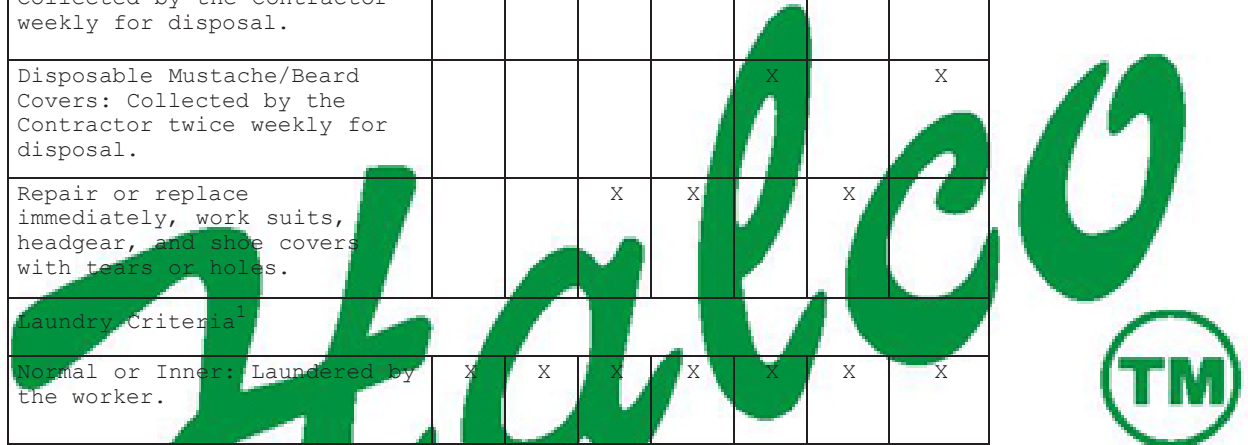




TABLE 4 - Garments Required Inside the Clean Zone and Cleanroom							
Description	Stage						
	1	2	3	4 CZ	4 CR	5 CZ	5 CR
Responsibility of the worker.	X	X	X	X	X	X	X
Wear protective covers over portions of exposed mustaches, beards, and head hair while working inside designated Clean Zones or cleanrooms.			X	X	X	X	X
Do not apply aerosol aftershave, perfume, cologne, fragrant lotions, cosmetics, or other toiletries to exposed portions of the face while working inside the Clean Zones.			X	X	X	X	X
Wear cleanroom garments and accessories properly, as well as advise and assist any others who are improperly covered.			X	X	X	X	X
Do not work inside the cleanroom if sick with allergies, cold or other sneeze-style maladies.					X		X
1. Store clean garments and accessories in sealed plastic bags prior to issue. 2. Stage 4 and 5: include Process Tool Staging Area as part of the Clean Zone. 3. Stage listed as "_CZ" applies to Clean Zone only; Stage listed as "_CR" applies to Cleanroom only.							





1.11 CLEAN ZONE ENTRY REQUIREMENTS

TABLE 5 - Clean Zone Entry Requirements					
Description	Stage				
	1	2	3	4	5
<p>★ and ★ Level Entry Requirements:</p> <p>a. Provide temporary walk-off mats and tacky mats at each entry to the ★ and ★ Levels prior to the beginning of mechanical, electrical, process, and plumbing construction in these spaces. These walk-off mats and tacky mats must be worn throughout the duration of construction, commissioning, and closeout.</p> <p>b. Other rows within this table do not apply to the ★ and ★ Levels.</p>					
Personnel (Listed Sequentially)					
Utilize temporary gown room.			X		
Utilize permanent gown room.				X	X
Clean outdoor shoes upon entry to gown room, using automatic shoe cleaners.			X	X	X
Remove outdoor shoes on dirty side of gown room bench. Change into clean zone shoes on clean side of gown room bench.			X	X	X
Change into clean zone garments; enter clean zone.			X	X	X
Exit clean zone, remove and store clean zone garments, remove and store clean zone shoes, cross gown room bench, change into outdoor shoes, exit gown room.			X	X	X
Equipment					
Utilize temporary equipment staging room.			X		
Utilize permanent equipment staging room.				X	X



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TABLE 5 - Clean Zone Entry Requirements					
Description	Stage				
	1	2	3	4	5
Clean equipment prior to entry into clean zone.			X	X	X
Process Tool Staging Area: Use the permanent equipment staging room for process tool unpacking, cleaning, and run-in testing.				X	X

1.12 DELIVERY, STORAGE, AND HANDLING

a. Delivery:

1. Ship Clean Zone components with an approved waterproof double layered protective coverings of the complete assembly, and associated components individually, packaged to prevent transit and construction dust from contaminating the surfaces.
2. All coverings shall be readily removable after installation, or as required for installation removed outside Clean Zone in advance of installation within Clean Zone construction.
3. Return material or equipment to the manufacturer for re-cleaning and repackaging where the original shipping protective wrap was torn or defective.
4. Any materials or equipment materially damaged or contaminated due to defective packaging, and deleterious material accumulation rendering that material, product or component deficient for Clean Zone installation, shall be marked "Rejected" and replaced by the Contractor.

b. Storage:

1. Materials shall be sealed in their original unopened packages.
2. Seal open ends of ducts and pipes with moisture proof barrier until product is being connected during installation.
3. Store all materials, products, and components in original protective packaging in a safe, dry, adequately ventilated area, free from heavy dust and not subject to combustion products, sources of water or other conditions to prevent damage or intrusion of foreign matter. Conspicuously mark rejected on any



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materials that have been damaged and remove them from the job site.

- 4. Store products within the building in controlled space designated by the Contractor.
 - 5. Do not store products in the staging area in excess of that used in 1 day's work.
 - 6. Do not store contaminated materials in the staging areas or Clean Zone.
- c. Handling:
- 1. Handle components with extreme care to prevent damage.
 - 2. Remove or strip packaging inside the designated equipment staging room outside the cleanroom per Contracting Agency instructions.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 SUBMITTAL SCHEDULE

ITEM NO	SUBMITTAL REQUIREMENT	UFC CLASSIFICATION	AS INDICATED
1	Compliance Matrix: Compliance Matrix for this specification noting "Comply", "Deviate", or "Exception". Deviations or Exceptions must be explained in writing with Submittal, including definition of alternative approaches where applicable.	SD-01	
2	Cleanroom Construction Contractor Experience: Submit experience of the contractor that will be responsible for constructing the cleanroom ceiling, walls, raised access floor, doors, wall/floor penetrations and penetration sealing, and other accessories within the cleanroom. Documentation of experience must include a minimum of 20,000 square feet of clean room construction (Class 10, 100, 1000 combined) in the region. Include itemized breakdown of constructed cleanrooms by square footage and cleanliness classifications for review. Include breakdown of projects that utilize specialty cleanroom ceiling, flooring, and lighting systems for review including approximate square footages of cleanroom space.	SD-01	

-- End of Section --