

## REVISIONS

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10/11/95

NAME	DATE	MASSACHUSETTS INSTITUTE OF TECHNOLOGY CENTER FOR SPACE RESEARCH			
Drawn: M. Smith	7-19-95	<h3 style="margin: 0;">CLEANING PROCEDURE for ACIS CLEANTENTS</h3>			
Checked: <i>Brian Klatt</i>	<i>10/11/95</i>				
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## 1.0 Introduction

This procedure is to be used when cleaning all cleanrooms for the ACIS Program in rooms NE80-6042 and 37-524.

### 1.1 Activity Description

This procedure is to be performed as a simple wiping motion not as a rubbing motion. The idea is to gently remove any particles that lie on all surfaces inside the cleanroom. (There should be no need to rub hard on any surface.) Any material brought into the cleanrooms shall meet the requirements of procedure, 36-01316 "Cleanroom Dressing, Behavior, and Material Handling". All cleaning materials should be stored in the cleanroom dressing area after they are opened. If any cleaning material is removed, it must be re-cleaned prior to admittance back into the cleanroom per procedure, 36-01316, "Cleanroom Dressing, Behavior, and Material Handling".

## 2.0 Requirements

### 2.1 Applicable Documents

- 36-01316 Cleanroom Dressing, Behavior, and Material Handling
- 36-01318 Cleanroom Monitoring Procedure.

### 2.2 Frequency

2.2.1 Each cleanroom shall be cleaned bi-weekly by the Contamination Engineer, Matthew Smith or his designated helper, Mr. Be Ware. Cleaning frequency can vary depending on the activity during the previous weeks. This will be determined by the Contamination Engineer.

2.2.2 The prefilters to the HEPA filters shall be inspected and replaced or vacuumed, depending on the style, on monthly basis by the Contamination Engineer, Matthew Smith or his designated helper, Mr. Be Ware.

2.2.3 Inspections to be performed per 36-01318, Cleanroom Monitoring Procedure by the Contamination Engineer Matthew Smith.

## 3.0 Facilities and Configurations

### 3.1 Materials

The following is a list of acceptable materials that meet Class 100 packaging:

NOVA Lab and Glass Cleaner- for stainless steel tables, racks and glass

NOVA Floor Cleaner- for floors and mats.

NOVA Strata Mop- for washing floors, with cleanroom approved mop handle, and buckets.

ALPHA 10 or ALPHAWIPE- clean dry TexWipes for cleaning spray or alcohol spray.

Alpha Sat-Alpha Wipes, Texwipe No. TX1039- for wiping down benches, walls, tent frame, ceiling, etc.

Ultra Pure Deionized (DI) Water- for mixture with NOVA floor cleaner.(4 gallons)

Stainless Steel Bucket and Wringer- For mixing DI water and NOVA Floor Cleaner.

Liberty Model 677 latex gloves

Purolator 14x18x1 Replacement Pre-filters

Novacel or Novawipe sponge

## **4.0 Procedure**

### **4.1 Schedule**

Cleaning of the clean tent is to be performed bi-weekly on Friday afternoons, or Saturdays, when possible. If this is not possible, the work area shall be cleaned on the next available workday.

### **4.2 Dress Attire**

Proper clean tent attire shall meet procedure, 36-01316 "Clean Tent Dressing, Behavior, and Material Handling". Wear Liberty Model No 677 gloves. Wipe gloves with Alpha Sat wipe.

### **4.3 Assembly Material**

**Ensure all critical assembly material is properly covered, preferably in covered totes or sealed bags, or inside drybox prior to initiating cleaning. If material needs movement ensure you are properly grounded.**

### **4.4 Prepare Floor Solution**

Prepare floor cleaning solution while in the dressing area prior to entering clean tent to prevent unnecessary changing of clothing. Rinse and clean bucket with DI water. After this rinsing and cleaning, mix 4 gallons of Ultra Pure Deionized Water in a stainless steel bucket with 8 ounces of NOVA CLEAN floor cleaner.

### **4.5 Cleaning**

#### **4.5.1 Ceilings, Walls, Racks, Tables and Equipment**

Clean ceiling, walls, racks, tables and equipment surfaces by starting at the ceiling and the tent frame, working down towards benches, equipment, etc. Clean glass and stainless steel surfaces using NOVA Lab and Glass cleaner sprayed onto a clean dry ALPHA 10 or ALPHAWIPE. Clean walls, frame, tables, tote boxes and other surfaces with either ALPHASAT- ALPHAWIPE wipes from the presaturated canisters (keep canister closed when not in use to prevent drying of the wipes) or Novacel or Nova wipe sponge saturated with NOVA Lab and Glass cleaner. Clean by wiping in one direction only, from either left to right or right to left. Only wipe down an area once so as not to wipe over a previously cleaned surface. Be careful not to create turbulent airflow during wiping. This is for general wipe down not hard strenuous cleaning.

#### **4.5.2 Floors**

After all surfaces above the floor are cleaned, mop the floor starting at the farthest corner of the tent, from the entrance/exit, in a slow steady manner that will not create turbulent air in the room. Change the mop head when dirty. NEVER DRY MOP THE FLOOR BEFORE CLEANING.

#### **4.5.3 Water Disposal**

The water should be discarded and the bucket rinsed with Deionized water and dried with lint free wipes, then stored in one of the clean tent dressing areas. Store the mop in an upright position so that the mop head can dry easily. (Do not rest the mop head on the floor or in the bucket.)

#### **4.6 Filter replacement**

Replace the blue prefilters to the HEPA filters monthly using Purolator 14x18x1 F filters. The gray prefilters are not replaceable and need to be vacuumed monthly. This is to be performed on the first Friday of each month. Mark the date on the prefilter prior to installation.

#### **4.7 Certification**

After cleaning is complete, sign and date the log sheet, Attachment A. When filters are replaced or vacuumed sign and date Attachment A.

#### **4.8 Inspection**

Inspections to be performed during Cleantent Monitoring Procedure 36-01318.



