PART 1 GENERAL

PART 1.01 GENERAL INFORMATION

This Section specifies all requirements necessary to furnish and install Cyanoacrylate Fuming Chamber including, but not limited to the following:

- 1. This specification covers the requirements for Cyanoacrylate Fuming Chamber with a negative pressure flow with a fully exhausted work environment.
- 2. Nominal 3 foot widths are covered by this specification.
- 3. This specification sets the intent for quality, performance and appearance.
- 4. Supply and install as scheduled in laboratory schedule and drawings.
- 5. Coordinate installation with other trades to avoid onsite conflicts.
- 6. Reference related sections within the specification document in conjunction with the following specifications to insure total requirements for the referenced Cyanoacrylate Fuming Chambers are provided.

1.02 QUALITY ASSURANCE

 The manufacturer shall maintain a testing facility at their place of business for the performance testing of the work stations. Both the supply of the work stations and installation shall be in conformance to good construction practice and approved by the owner/user. The test facility as well as the manufacturing facility must be available for an owner/user inspection and its quality control procedures. All work stations to be wired for 115 volts, 60 Hz

1.03 REFERENCES

1. The Cyanoacrylate Fuming Chamber shall conform to the current regulations and federal standards.

1.04 SUBMITTALS

- 1. Cyanoacrylate Fuming Chamber specification sheets and product manuals shall be submitted by the manufacturer upon request. The supplier shall submit shop drawings when necessary for clarification.
- 2. Provide a detailed copy of the test results conducted prior to shipping to ensure compliance shall be shipped with each cabinet.

1.05 DELIVERY AND STORAGE

- 1. Cyanoacrylate Fuming Chamber shall be delivered in unopened crated packages adequately protected from damage during shipment.
- 2. Exercise extreme care in handling all work stations to prevent any damage.
- 3. Store materials within the building in the space designated for storage. Store materials in such manner as to prevent any damage or intrusion of foreign matter. Any damaged materials must be noted and scheduled with the job site installation foreman for removal and replacement from the job-site prior to installation.

1.06 WARRANTY

1. Manufacturer's warranty against defects in material or workmanship for 1 year from date of shipping, shall include replacement of parts (except prefilters, HEPA or ULPA filters and lamps) and labor. The cabinet supplier shall not be responsible for or liable for any modifications, alterations, misapplication or repairs made to the products in the field after product final installation.

"Simply Building Better Environments For Advanced Technology & Life Sciences"

Microzone Corporation, 86 Harry Douglas Drive, Ottawa, Ontario, Canada K2S 2C7 Telephone: (613) 831-8318 Toll Free: (877) 252-7710 Fax: (613) 831-8321 Email: <u>sales@microzone.com</u>Web Site: <u>www.microzone.com</u>

PART 2 - PRODUCTS

2.01 PRODUCT NAME

Cyanoacrylate Fuming Chamber, model number as described below: 3 Foot Model: CAFC-3

2.02 ACCEPTABLE MANUFACTURER

Microzone Corporation, Laboratory Equipment Group, 86 Harry Douglas Drive, Ottawa, Ontario, Canada, K2S 2C7 Phone: 613-831-8318, or Toll Free: 1-877-252-7710 Fax: 613-831-8321, Email: <u>sales@microzone.com</u>

2.03 MATERIALS OF CONSTRUCTION

- 1. Interior construction shall include walls constructed from white polyvinylchloride. The interior liner shall also include (qty-4) integral flow through removable/adjustable storage shelves constructed from white polyvinylchloride.
- Exterior panels shall be constructed from white/accent color polyvinylchloride without exposed bolts or nuts.
- 3. The supply and exhaust plenum shall be integral and constructed from white polyvinylchloride. The exhaust shall terminating in a duct collar connection flange which can either discharge to a building provided stack vent or re-circulate back into the room.
- 4. Air discharge from the enclosure shall be via a direct duct building connection or a multi stage filtration featuring: 40% minimum efficient primary in line pre-filter, with secondary in line Carbon filter pack designed to remove odors, light gases, particulates and gaseous pollutants. These shall be integral to the enclosure.
- 5. An additional mini chamber shall be incorporated into the module for fuming smaller items. This chamber features a removable sealed base plenum which opens to a larger chamber for fuming larger items.
- 6. The surface mounted hinged access doors shall include thick clear P.V.C. view window enclosed in a heavy duty all modular anodized square aluminum sealed frame with integral corner inserts and pre-drilled door locks and identification slots.
- 7. The interior integral bottom of module shall incorporate a bottom mounted drain with optional automatic fan re-circulating system.
- 8. Integral heater tray with remote temperature controller.
- Electronic "AFI-X2" airflow alarm gauge shall monitor system exhaust airflow. This system reports the static condition of the unit's exhaust airflow providing both visual and audible alarms signaling a problem with the building exhaust fan or increased static pressure.
- 10 . All services factory plumbed and wired for single point field connection.

"Simply Building Better Environments For Advanced Technology & Life Sciences" Microzone Corporation, 86 Harry Douglas Drive, Ottawa, Ontario, Canada K2S 2C7 Telephone: (613) 831-8318 Toll Free: (877) 252-7710 Fax: (613) 831-8321 Email: <u>sales@microzone.com</u>Web Site: <u>www.microzone.com</u>

2.04 FABRICATION

- 1. Overall exterior dimensional information of Cyanoacrylate Fuming Chamber is as described in the table. Nominal Dimensions: 3 ft. Model: 24" w x 36" d x 75" h
- 2. The exterior shell shall be constructed from white polyvinylchloride, with continuous seam welded construction complete with a removable front access panel with sufficient structural reinforcement to provide a rigid, stable unit.
- 3. The interior shell shall be constructed from white polyvinylchloride. The containment plenum shall have a leak tight continuous seam welded design with rounded corners.
- 4. Provide a full width containment plenum which shall be effectively exhausted and drained via a sloped bottom towards drain with remote pumping valve and "P" trap containment.
- 5. Provide full width integral exhaust plenum from the top, exhausting the work volume and the secondary containment plenum. The air intake airflow slots, located in front of the airfoil's inflow grille, shall draw air directly into the cabinet through the secondary containment plenum directly to top exhaust plenum duct collar connection.
- 6. Cabinet assembly shall be constructed such that all plenums are negative pressure plenums. Cabinet shall be designed such that all major service operations can be performed from the front of the cabinet.
- 7. Door shall be a hinged all sealed lockable type, capable of moving to a fully opened position when cabinet is not in operation.
- 8. All major electronic components (speed control, switches, circuit breakers) shall be housed in a removable module for service or testing, located in the front valence of the cabinet.
- 9. The cabinet shall be pre-wired terminating in an electrical service outlet located on the rear base section ready for connection to a suitable 115 volt service.

PART 3 - EXECUTION

3.01 INSPECTION

1. Carefully check the contents of the carton for damage that might have occurred in transit.

3.02 PREPERATION

- 1. Verify equipment rough in before proceeding with work.
- 2. Coordinate with other trades for the proper and correct installation of plumbing and electrical rough in and for rough opening dimensions required for the installation of the hood.

3.03 INSTALLATION

- 1. Install according to manufacturer's instructions.
- 2. Install according to standards required by authority having jurisdiction.
- 3. Install equipment plumb, square and straight with no distortion and securely anchor as required.
- 4. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.
- 5. Touch up minor damaged surfaces caused by installation. Replace damaged components as directed by Architect.

"Simply Building Better Environments For Advanced Technology & Life Sciences" Microzone Corporation, 86 Harry Douglas Drive, Ottawa, Ontario, Canada K2S 2C7 Telephone: (613) 831-8318 Toll Free: (877) 252-7710 Fax: (613) 831-8321 Email: <u>sales@microzone.com</u>Web Site: <u>www.microzone.com</u>

3.04 FIELD QUALITY CONTROL

1. A qualified independent certifier should certify the cabinet before use. The certifier should perform tests as recommended in the manual.

3.05 CLEANING

- 1. Clean equipment surfaces as recommended by the manufacturer, rendering all work in a new and unused appearance.
- 2. Clean adjacent construction and surfaces, which may have been soiled in the course of installation of work in this section.

3.06 PROTECTION

- 1. Provide all necessary protective measures to prevent exposure of equipment and surfaces from exposure to other construction activity.
- 2. Advise contractor of procedures and precautions for protection of material from damage by work of other trades.