A. **Sheldon 92244 Air Foil Fume Hood:** TP 08.17.17

Double-Sided, 4-ft. width, Teacher Demo, Pass-thru (EH-211-48)

1. Dual access, Air foil type fume hood: Features shall include a 45-degree angle around the fascia openings, flush-mount radiused air foils across the bottom, upper front panels with louvered air bypass grille for constant volume with vertical sliding sashes, all resulting in minimized turbulence and increased performance for removal of exhaust fumes, vapors, and particulate matter within the enclosure. Provide double-sided hood with access from both sides to allow for Classroom teacher demonstration or Prep Room pass-thru setting.

2. Superstructure: Provide full frame construction, 16” and 18” gauge steel, rigid, self-supporting assembly with 5” wide, double walls and front posts. Walls consist of a sheet steel outer shell and a corrosion resistant full inner liner, and houses electrical services and remote operating service fixtures. Access to fixture valves is provided by four (4) removable panels with a PVC gasket. Top of the hood contains a 10” round, 20-gauge stainless steel exhaust duct collar. Hood shall be UL 1805 Classified.

3. Sash frame: Steel frames includes a 16-gauge, 1-1/2” bottom sash rail with a full width pull closing on rubber bumper stops, and 7/32” thick laminated safety glass housed into sash frame and set into PVC glazing channels. Provide sash interlock that allows only one (1) of the two (2) sashes to be opened at any time.

    a. Powder-coated sash frames are raised and lowered with a counter balance system consisting of weight, 2” pulleys, and cable that prevents sash tilting by means of a shaft driven mechanism. This permits one-finger operation at any point along full width of pull. Sash cable is 7 x 7 steel, 1/8” diameter, coated to 5/32” diameter.

    b. The powder-coated, flush-mount, bottom horizontal air foils shall provide a 1” bypass to ensure a clean sweep of air to minimize eddies along the work surface when sash is in the closed position.

4. Standard features of the hood shall include:

    a. Black powder coat finish, white 3/16” Poly Resin liner, two (2) T-8 rapid start fluorescent light fixtures with single lamps, 1-1/4” thick, black Shelresin, molded, dished, epoxy resin work surface, remote controlled services, and base cabinet.

    b. Superstructure shall be pre-wired and pre-piped by manufacturer. **Service rough-ins and trap not included.**

    c. Provide a metal enclosure panel from top of hood to ceiling.

    d. Hood design shall comply with SEFA 1-2010, Recommended Practices for Laboratory Fume Hoods.

5. Hood Exhaust Ratings:

   a. 100 FPM recommended face velocity. 833 CFM exhaust with .33-inch static pressure loss through hood.
   Exhaust duct and blower not included.

6. Source Quality Control Testing of Fume Hoods:

   a. Evaluation of a manufacturer's proposed product shall take place in their own test facility with no cost to the Owner. Provide third party, independent test reports to Architect for approval.

   b. Fume Hood shall be tested as described in SEFA 1-2010 in accordance with latest edition of ASHRAE 110 method of testing performance of laboratory fume hoods, As Manufactured (AM). Hoods shall achieve a rating of 4.0 AM 0.05 ppm or less.

7. Standard services and accessories included:

   (1) Remote control CW gooseneck with powder coat finish.
   (1) Remote control Gas outlet with powder coat finish.
   (2) 85101 GFI duplex electrical outlets.
   (1) 85106 Light switch.
   (1) 85106 Exhaust blower switch.
   (1) TS04 Epoxy resin cup sink.
   (1) AFA 500 Air Monitor Alarm provided **only when specified.**