



Fisher American LLC
Fisheramerican.com
800-419-1900

UL Test Report For:
Fisher American LLC



IN ACCORDANCE WITH UL 1805 or
AS TO FIRE, ELECTRICAL AND MECHANICAL
HAZARDS

CERTIFICATE OF COMPLIANCE

Certificate Number MH62660
Report Reference MH62660-20200728
Issue Date 2020-JULY-31

Issued to: National Laboratory Sales
2501 9th Street
Rockford IL 61107

**This certificate confirms that
representative samples of**

LABORATORY HOODS AND CABINETS

Laboratory Hood, Models w-dd-t-xxxx , where “w” can be 3, 4, 5, 6 or 8 in width in feet; “dd” can be 32, 38, 48 or 72 in depth in inches; where “t” can be E, S or W denoting the worksurface as Epoxy, Solid or Walk-in; where “xxxx” denote the valve types.

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 1805, LABORATORY HOODS AND CABINETS.
Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

CLASSIFICATION MARK

COMPOSITION AND ELEMENT:

The Classification Mark shall consist of the following and shall appear on the product container packaging or as indicated in the Guide Information for the CCN.

(APPROPRIATE PRODUCT IDENTITY)
IN ACCORDANCE WITH UL 1805 or
AS TO FIRE, ELECTRICAL AND MECHANICAL
HAZARDS ONLY
MH62660

MARKING:

The following symbol must be located adjacent to or in close proximity to the regular Classification Mark as shown above.



The minimum height of the registered trademark symbol ® shall be 3/64 of an inch. When the overall diameter of the UL Mark is less than 3/8 of an inch, the trademark symbol may be omitted if it is not legible to the naked eye.

PROCUREMENT:

The manufacturer may reproduce the mark or obtain it from a UL authorized supplier.

INDEX

Product	USC	CNC	Section
Models w-dd-t-xxxx , where "w" can be 3, 4, 5, 6 or 8 in width in feet; "dd" can be 32, 38, 48 or 72 in depth in inches; where "t" can be E, S or W denoting the worksurface as Epoxy, Solid or Walk-in; where "xxxx" denote the valve types	Yes	No	1

DESCRIPTION

PRODUCT COVERED:

Laboratory Hood, Models w-dd-t-xxxx , where "w" can be 3, 4, 5, 6 or 8 in width in feet; "dd" can be 32, 38, 48 or 72 in depth in inches; where "t" can be E, S or W denoting the worksurface as Epoxy, Solid or Walk-in; where "xxxx" denote the valve types.

GENERAL CHARACTER:

The products covered by this Report are Laboratory Hoods. They are intended to provide an enclosed work area with exhaust for capture and removal of gases, vapors, mists and particulate matter from the work area. The products operate with laminar airflow to provide personnel protection from the reactions performed inside the enclosure. These hoods range in length from 3 to 8 feet.

The fume hoods are equipped with the following: vertical, horizontal or combination sash (walk-in types are only provided with vertical sashes); interior fluorescent lighting; convenience receptacles; fire and corrosion resistant interior; airflow distribution system (baffles or other means).

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

These hoods have been investigated for fire, electrical and mechanical hazards. Effectiveness and reliability of air flow for capture, containment, and exhaust have not been investigated. The UL 1805, 1st Ed. has been used as the basis of this investigation for each hood type and size. Also, suitability for use with perchloric acid, radiological materials or the like has not been investigated.

Requirements for the installation of this equipment are included in the Standard for Fire Protection for Laboratories Using Chemicals, NFPA 45.

ELECTRICAL RATING:

Rated 120 or 240 Vac, 60 Hz, 20 A

CONSTRUCTION DETAILS:

The product shall be constructed in accordance with the following description.

Flammability - The hood interior and the exhaust system or ducting integral to the hood are constructed of nonflammable materials or materials Classified by UL as having a flame spread index of 25 or less when tested in accordance with ASTM E84, Test for Surface Burning Characteristics of Building Materials.

Electrical Spacing - (Line voltage). Spacing through air and over the surface of insulating material are provided between (A) bare live parts and grounded parts, (B) bare live parts of opposite polarity or of surface circuits; and (C) bare line- and low-voltage parts, inches:

Potential Involved, (RMS)	Through Air	Over Surface
0-50	3/64	3/64
51-150	1/16	1/16

Internal Wiring - Unless otherwise specified, all internal wiring is Recognized Component AWM (AVLV2), insulation 1/32 in. thick minimum, rated 300 V, 105°C, No. 12 AWG THHN minimum.

Electrical Tubing and Sleeving - Recognized Component Tubing (YDPU2) and/or sleeving (UZFT2) rated 90 deg. C minimum.

Work Surface - (Optional) - Epoxy manufactured by Durcon shall have a 0.375 in. (9.5 mm) recess in surface or a curb across the front of the hood. All joints between the work surface and the sides, back and curb are to be sealed. Employed on bench-top types only. Worksurface material has been additionally-evaluated in accordance with Standard Method of Test of Surface Burning Characteristics of Building Materials, NFPA 255; Small Flame Impingement (UL 1805, Cl. 14); Chemical Resistance Test (UL 1805, Cl. 15); Resistance to Impact (UL 1805, Cl. 16).

Wire Routing - Wires (when provided) are routed away from sharp edges, moving parts, and uninsulated parts of opposite polarity and other circuits by means of cable ties and cable straps. When wiring passes through openings in sheet metal the openings are provided with nylon pass-through bushings or edges are smooth and well-rounded.

Electrical Connections - All electrical connections are made mechanically secured before soldering; or wiring terminates in Listed closed-loop type, upturned end type, turned in end type, or male/female quick-disconnect type terminals with positive engagement.

Corrosion Protection - All ferrous metal parts are suitably protected against corrosion by painting, plating or the equivalent.

Hood Service Controls - All controls for hood service (air, vacuum, gas, etc.) are located external to the hood and within easy reach.

Marking - Markings shall be permanent.

Exception: Labels that are not required (i.e., decoration or feature identification) need not comply with these requirements.

If Hood is pre-wired by manufacturer, marking consists of manufacturer, model series number, electrical ratings, and date code.

Convenience receptacle(s) provided on risers shall be marked with the following on each riser where convenience receptacles are employed: "20 A max" or equivalent.

The Service Control Center area is only intended for installations where it does not form part of the building air-handling space since there are receptacles and power cords provided in the SCC.

The units are marked with the Trademark "Fisher American".

List of Illustrations:

- Ill. 1 - 4 ft. bench top fume hood
- Ill. 2 - 6 ft. bench top fume hood
- Ill. 3 - 8 ft. bench top fume hood
- Ill. 4 - 10 ft. bench top fume hood
- Ill. 5 - 6 ft. walk-in fume hood
- Ill. 6 - 8 ft. walk-in fume hood
- Ill. 7 - 10 ft. walk-in fume hood

Bench Top Fume Hoods

General - The general design, shape and arrangement of parts shall be as illustrated except where variations are specifically described. Refer to Ills. 1-4 for mechanical drawings.

1. Outer Hood Enclosure - 16 and 18 Ga. painted or galvanized steel. Refer to Ills. 1 - 4 for overall dimensions. Bypass vent openings are provided on the hood front top face as noted: 4 ft.: 6 columns of 10 slots where each slot measures 5 by 0.2 inches; 6 ft.: 10 columns of 10 slots where each slot measures 5 by 0.2 inches; 8 ft.: 10 columns of 10 slots where each slot measures 5 by 0.2 inches; 10 ft.: 2 sets of 7 columns of 10 slots where each slot measures 5 by 0.2 inches.
2. Liners/Baffles: R/C (QMFZ2.E31703) Type CR-900 manufactured by Polyply Composites LLC, 4.6-5.0 mm thick (Evaluated for flame spread, chemical resistance, flame impingement and impact resistance in accordance with UL1805. Refer to Illustrations 1 - 4 for baffle positions and dimensions and air gaps.
3. Exhaust Outlet - 4 ft. hoods: one 6 x 15 in. rectangular opening; 6 ft. hoods: one 6 x 23 in. rectangular opening; 8 ft. hoods: one 6 x 36 in. rectangular opening; 10 ft. hoods: two 6 x 19.5 in. rectangular opening where each opening is spaced 29.75 in. from each outer edge of hood.
4. Service Fixtures and Controls - (Optional) - Constructed of brass. May be provided for air, water, steam, vacuum, gas, etc. Nozzles are located at least 6 in. from face of hood. Handles, valves and copper tubing can be provided for installation on site. All controls are located on side posts, exterior to the hood. Handles are marked with color-coded plastic inserts identifying the particular service.
5. Duplex Receptacle - Listed/Certified, rated 120 or 240 V, 20 A. Mounted in Listed/Certified 2-1/2 in. deep switch box secured to enclosure with screws provided with Listed/Certified faceplate.
6. Light Switch - Listed/Certified, rated 120/277 V, 20 A. Mounted in Listed/Certified 2-1/2 in. deep switch box secured to enclosure with screws provided with Listed/Certified faceplate.
7. Informational Marking - For pre-wired units-Consists of the following: Company name, model number, date code, and electrical ratings including volts, duplex current or watts, and cabinet current or watts.

For units not prewired, units consists of the following: company name, model number, date code and "All Hoods not Prewired at National Laboratories are to be wired at site in accordance with all applicable NEC and local codes."
8. Cabinet (Optional) - May or may not be provided with painted steel cabinet construction. Refer to Ills. 1 - 4 for dimensions when provided.
9. Sash - The hood sash glazing material is of laminated safety glass or tempered type, complying with ANSI Z97.1. It is free-moving, and counterbalanced to remain stationery at any position.

Walk-In Fume Hoods

General - Walk-In Fume Hoods are constructed identically as noted for Bench Top Fume Hoods except where explicitly noted below. Refer to Ills. 5 - 7 for mechanical drawings.

1. Outer Hood Enclosure - 16 and 18 Ga. painted or galvanized steel. Refer to Ills. 5 - 7 for overall dimensions. Bypass vent openings are provided on the hood front top face with 14 columns of 9 slots where each slot measures 5 by 0.2 inches.
2. Liners/Baffles: R/C (QMFZ2.E31703) Type CR-900 manufactured by Polyply Composites LLC, 4.6-5.0 mm thick (Evaluated for flame spread, chemical resistance, flame impingement and impact resistance in accordance with UL1805. Refer to Illustrations 5 - 7 for baffle positions and dimensions and air gaps.
3. Exhaust Outlet - 6 ft. hoods: one 6 x 23 in. rectangular opening; 8 ft. hoods: two 6 x 19.5 in. rectangular opening where each opening is spaced 24.625 in. from each outer edge of hood; 10 ft. hoods: two 6 x 23 in. rectangular opening where each opening is spaced 36 in. from each outer edge of hood.
4. Service Fixtures and Controls - (Optional) - Constructed of brass. May be provided for air, water, steam, vacuum, gas, etc. Nozzles are located at least 6 in. from face of hood. Handles, valves and copper tubing can be provided for installation on site. All controls are located on side posts, exterior to the hood. Handles are marked with color-coded plastic inserts identifying the particular service.
5. Duplex Receptacle - Listed/Certified, rated 120 or 240 V, 20 A. Mounted in Listed/Certified 2-1/2 in. deep switch box secured to enclosure with screws provided with Listed/Certified faceplate.
6. Light Switch - Listed/Certified, rated 120/277 V, 20 A. Mounted in Listed/Certified 2-1/2 in. deep switch box secured to enclosure with screws provided with Listed/Certified faceplate.
7. Informational Marking - For pre-wired units-Consists of the following: Company name, model number, date code, and electrical ratings including volts, duplex current or watts, and cabinet current or watts.

For units not prewired, units consists of the following: company name, model number, date code and "All Hoods not Prewired at National Laboratories are to be wired at site in accordance with all applicable NEC and local codes."
8. Cabinet (Optional) - Not provided.
9. Sash - The hood sash glazing material is of laminated safety glass or tempered type, complying with ANSI Z97.1. It is free-moving, and counterbalanced to remain stationery at any position.

SERVICE CONTROL CENTER

1. Duplex Receptacles (Optional) - Listed/Certified, rated 125 or 250 V, 20 A. Secured with screws, located external to the hood.

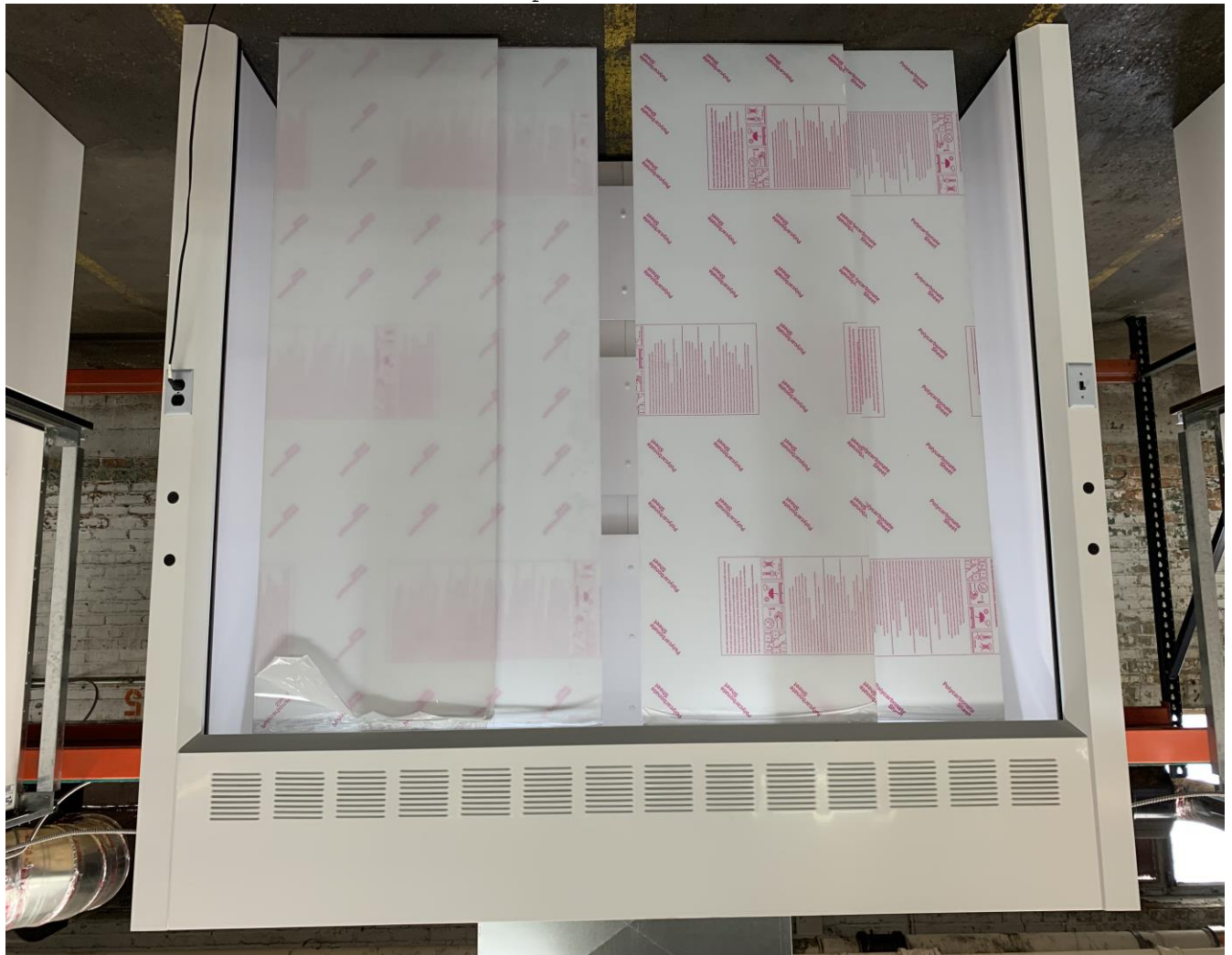
Alternate - GFCI Receptacles- Listed/Certified rated 125 or 250 V 20 Amps. Located internal to the hood.

3. Receptacle - Listed/Certified, rated 125 or 250 V, 20 A. Secured with screws, located external to the hood.
4. LED Light Fixture - Listed (QOVZ) micro LED Light rated 120 Vac, 60 Hz, 4 W.
5. Light Cover - The light cover is of laminated safety glass or tempered type, complying with ANSI Z97.1. Secured via R/C (QOQW2) silicone RTV adhesive rated 80 deg. C min.
6. Internal Wiring - R/C (AVLV2)/Certified AWM rated 300 V min, 16 Ga., 90 deg. C min.
7. Junction Box - Listed/Certified 4 in. square box, 2-1/8 in. deep junction box. Provided with a Listed cover.

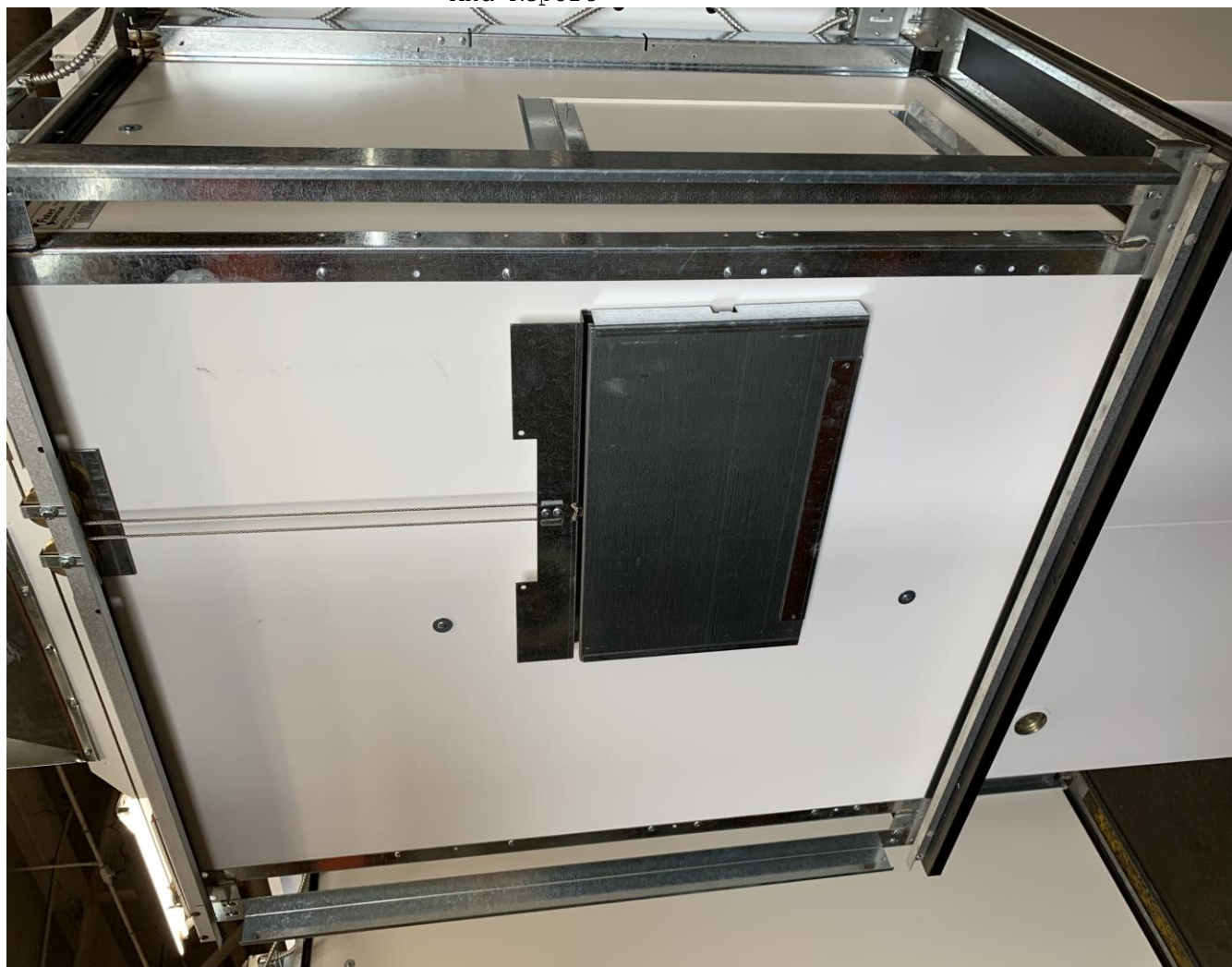
Listed/Certified cut out boxes (use to enclose control circuit components).
8. Conduit - Listed/Certified Type MC armored cable rated 600 V, 90 deg. C provided with 12 AWG
9. Conduit Fittings - Listed/Certified types suitable for knockout trade sizes of junction box.























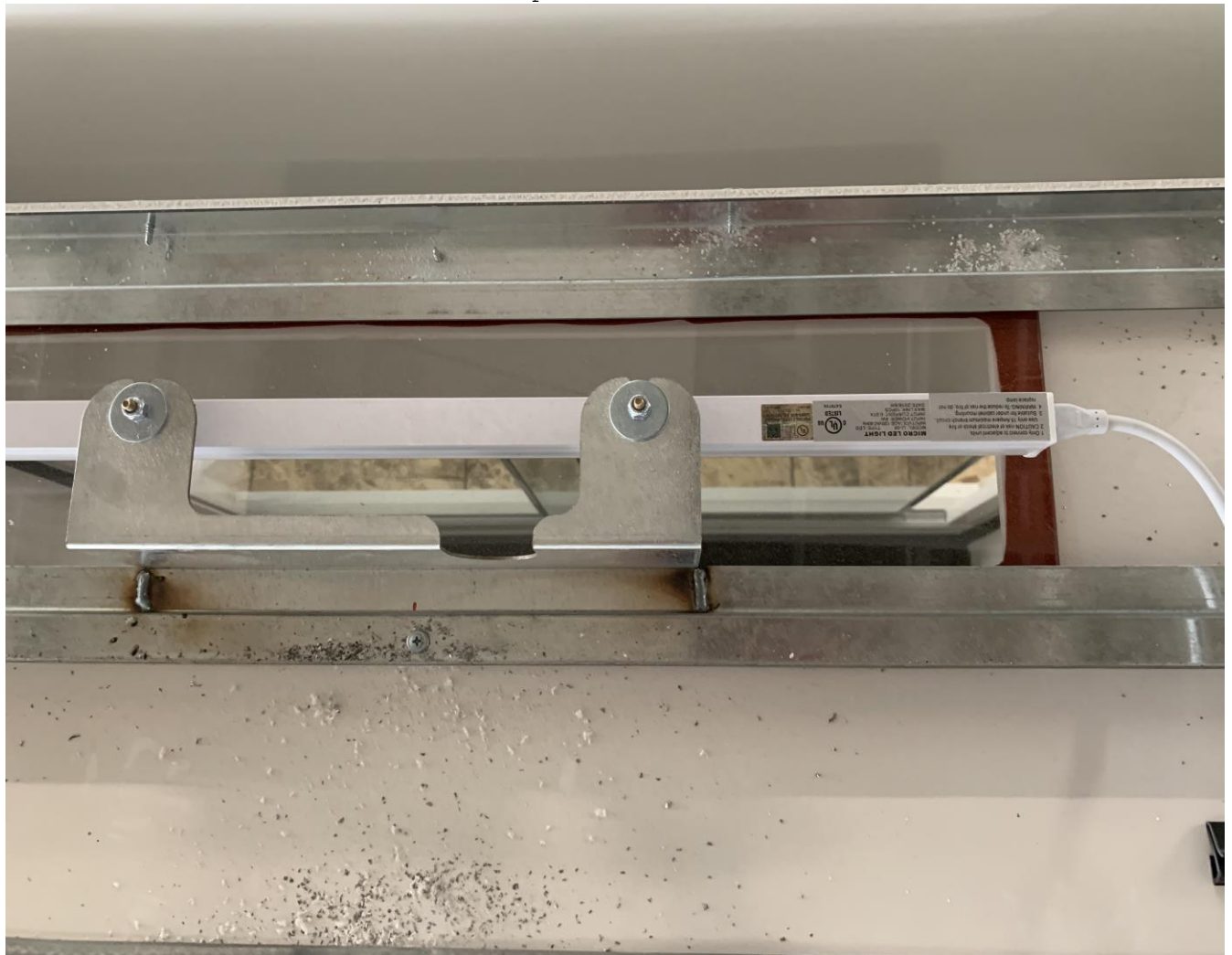


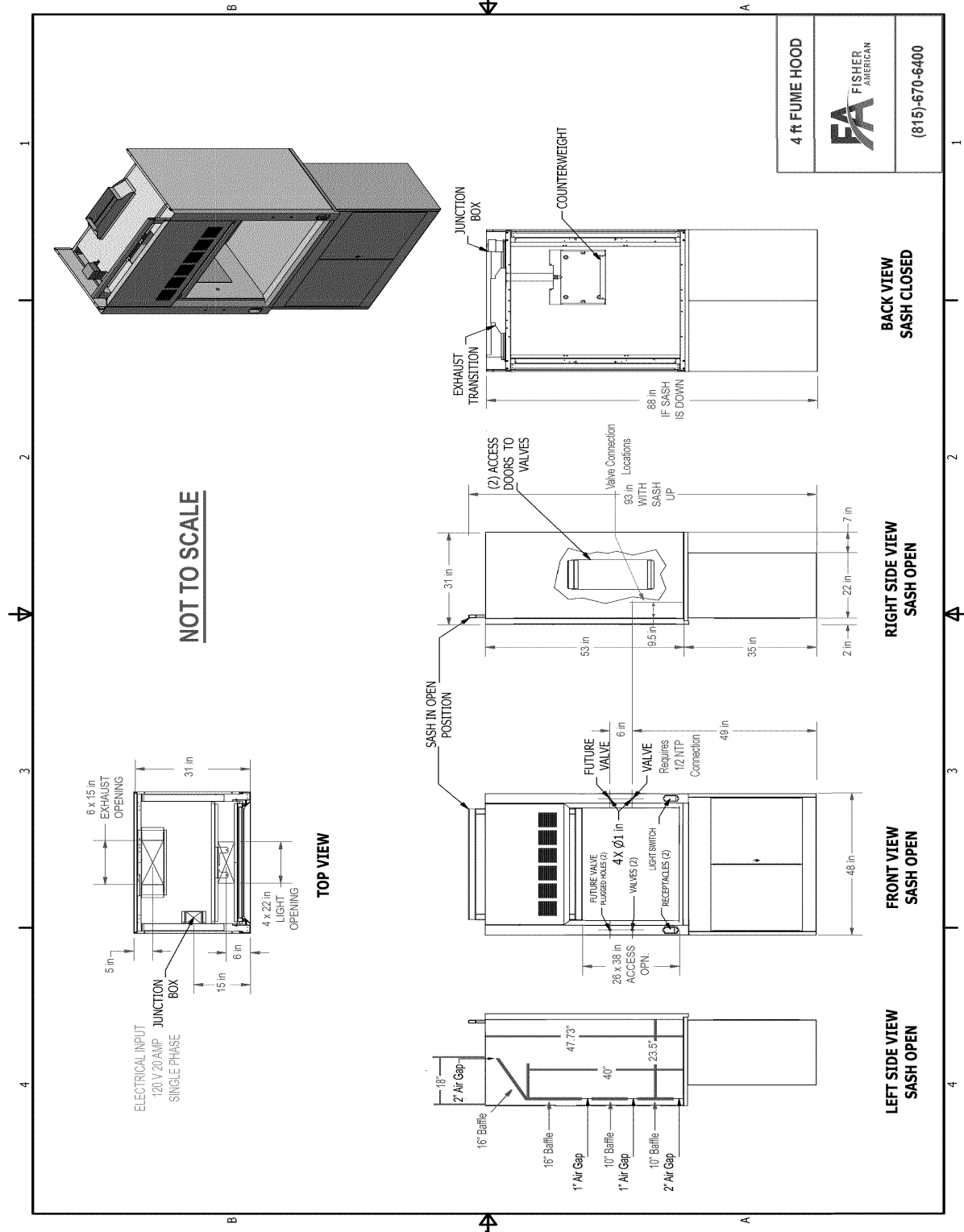


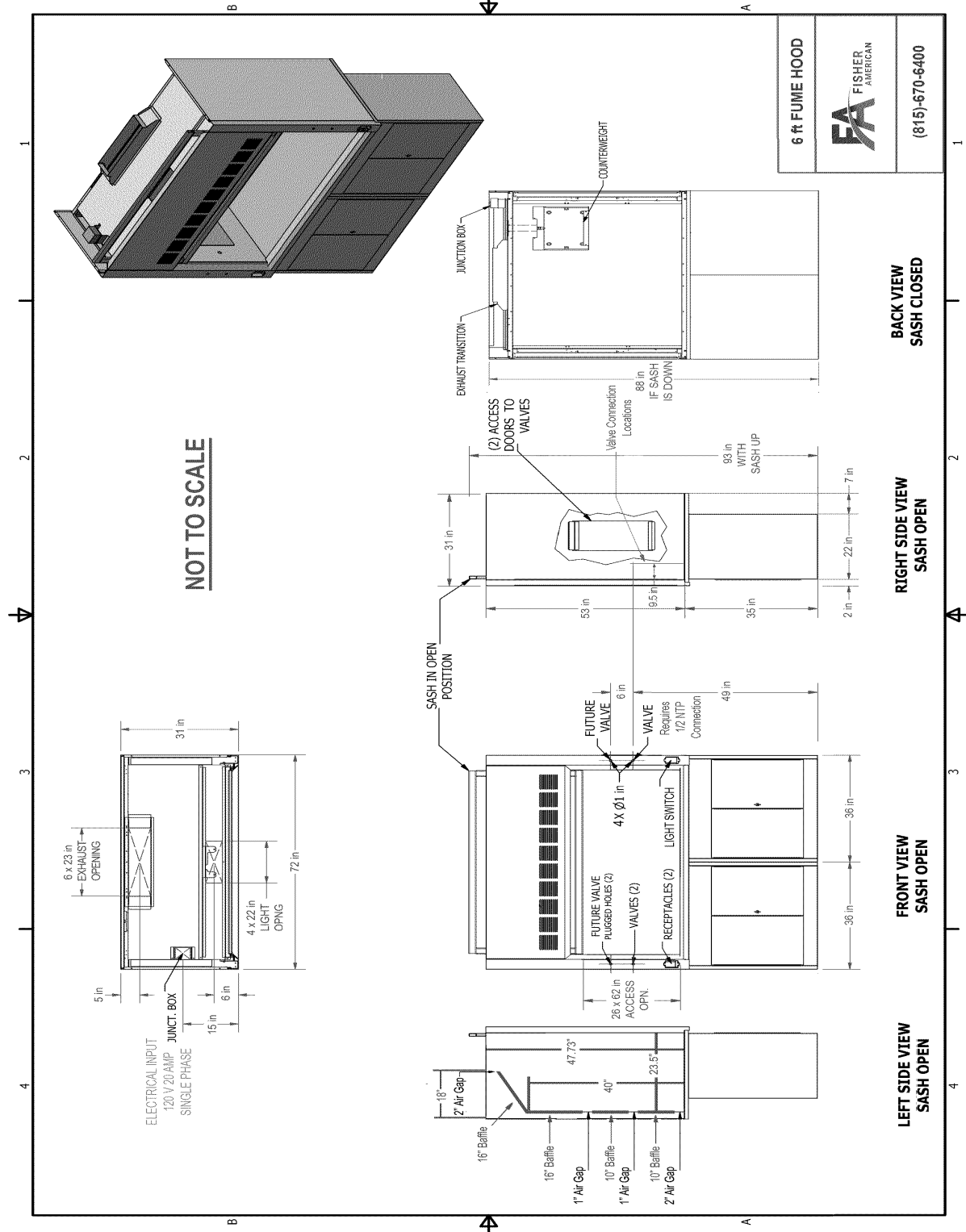


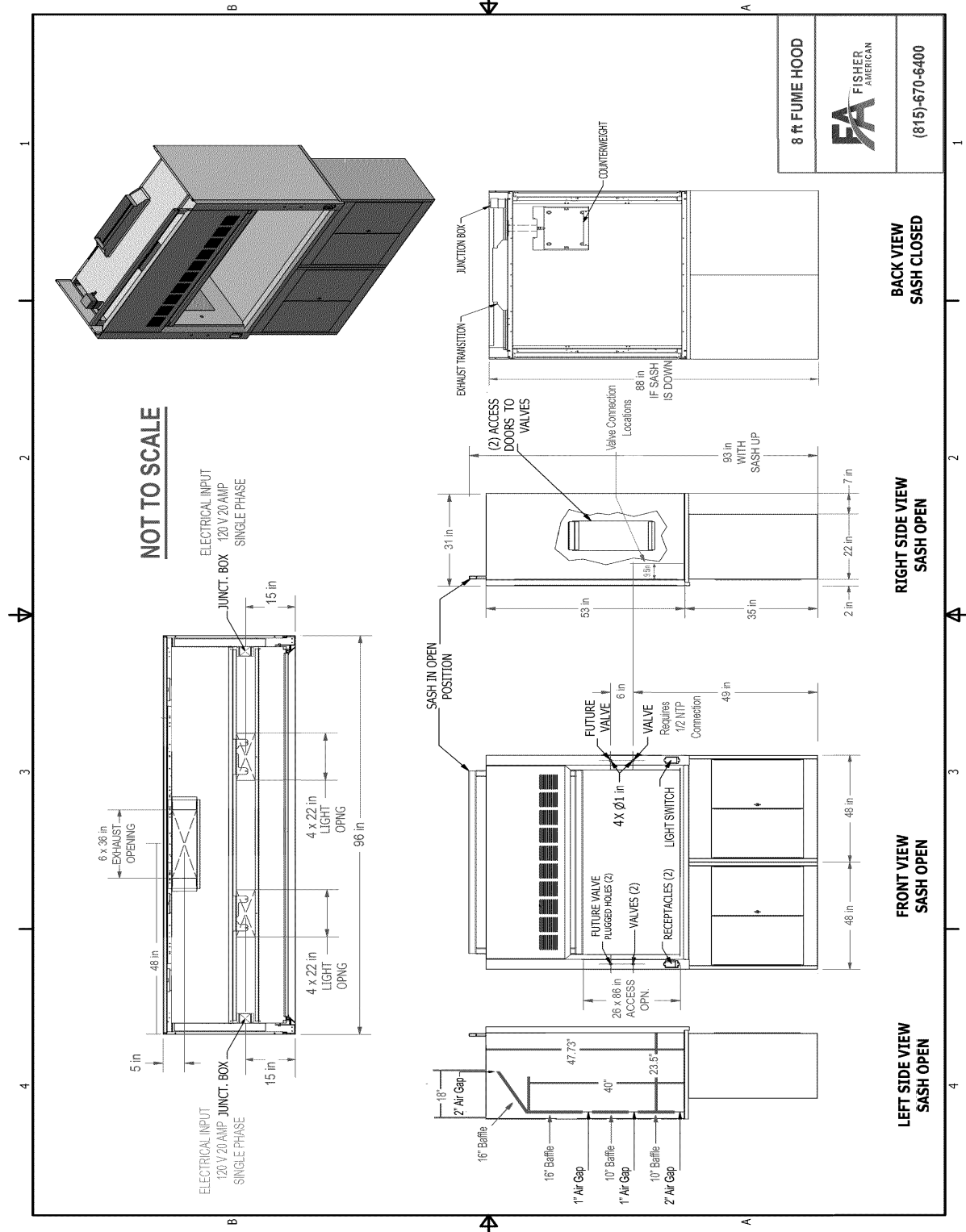


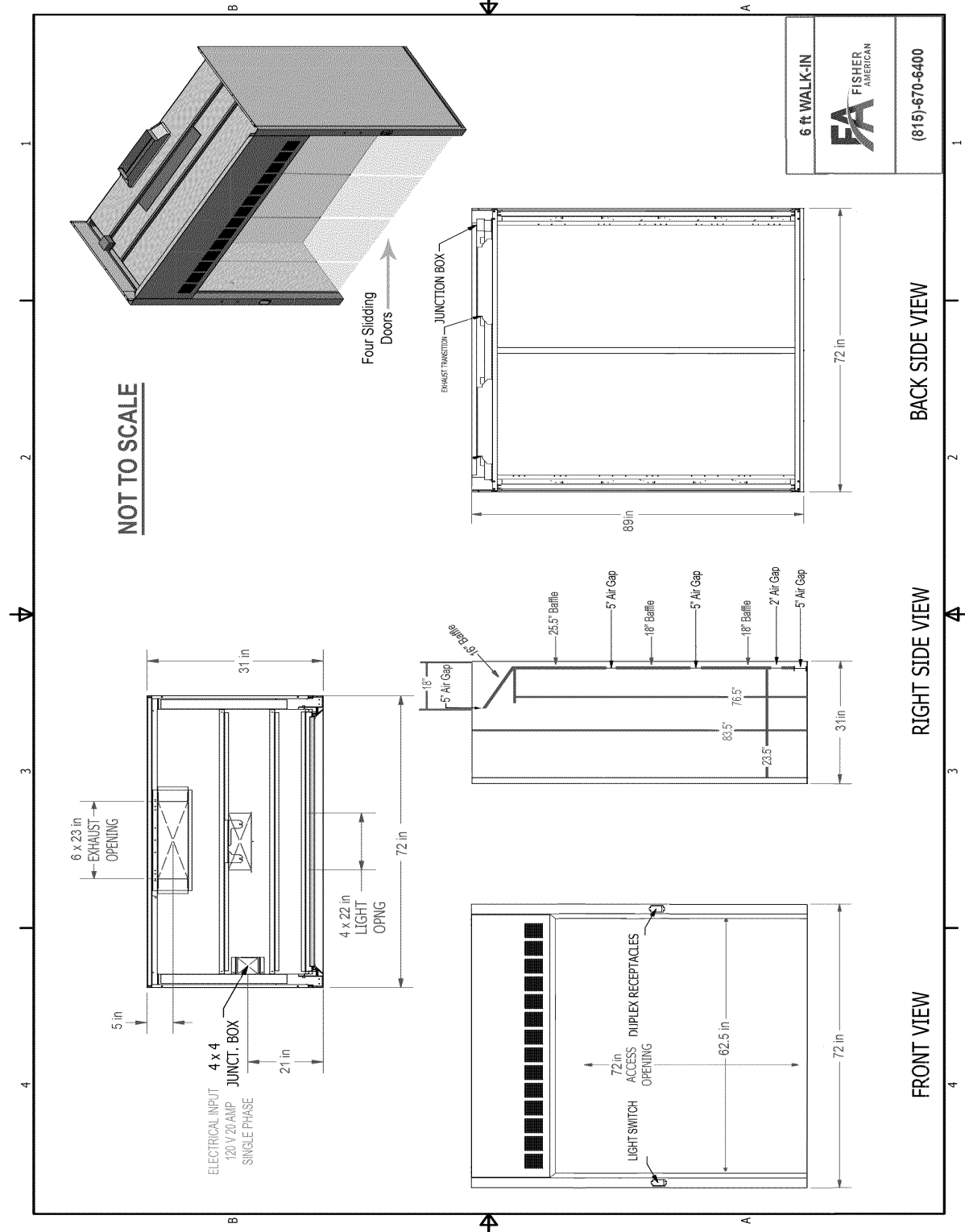


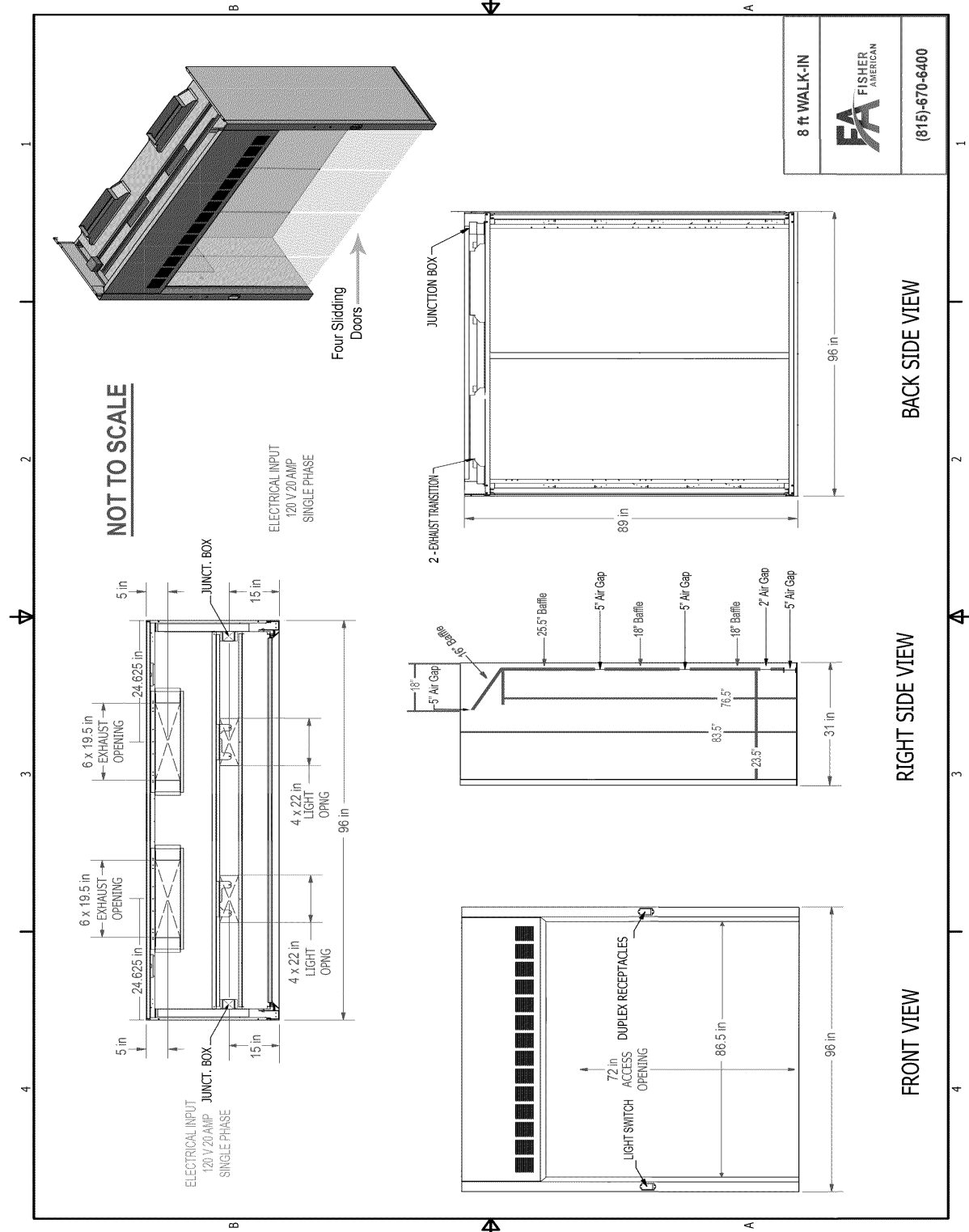


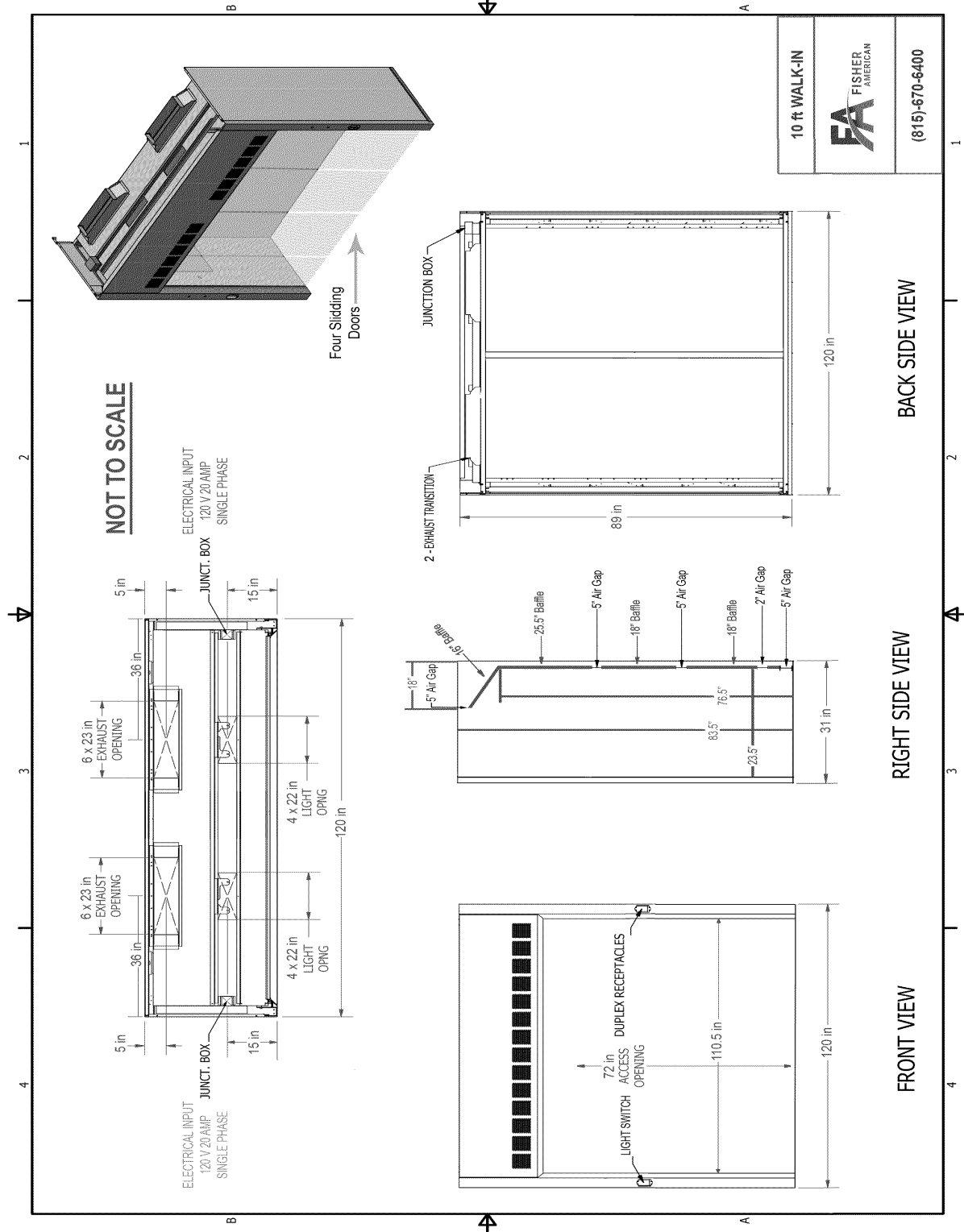












File MH62660
Project 4789400663

July 28, 2020

REPORT

on

LABORATORY HOODS AND CABINETS

Under The

CLASSIFICATION PROGRAM

National Laboratory Sales
Rockford, IL

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DESCRIPTION

PRODUCT COVERED:

Laboratory Hood, Models w-dd-t-xxxx , where "w" can be 3, 4, 5, 6 or 8 in width in feet; "dd" can be 32, 38, 48 or 72 in depth in inches; where "t" can be E, S or W denoting the worksurface as Epoxy, Solid or Walk-in; where "xxxx" denote the valve types.

GENERAL CHARACTER:

The products covered by this Report are Laboratory Hoods. They are intended to provide an enclosed work area with exhaust for capture and removal of gases, vapors, mists and particulate matter from the work area. The products operate with laminar airflow to provide personnel protection from the reactions performed inside the enclosure. These hoods range in length from 3 to 8 feet.

The fume hoods are equipped with the following: vertical, horizontal or combination sash (walk-in types are only provided with vertical sashes); interior fluorescent lighting; convenience receptacles; fire and corrosion resistant interior; airflow distribution system (baffles or other means).

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

These hoods have been investigated for fire, electrical and mechanical hazards. Effectiveness and reliability of air flow for capture, containment, and exhaust have not been investigated. The UL 1805, 1st Ed. has been used as the basis of this investigation for each hood type and size. Also, suitability for use with perchloric acid, radiological materials or the like has not been investigated.

Requirements for the installation of this equipment are included in the Standard for Fire Protection for Laboratories Using Chemicals, NFPA 45.

ELECTRICAL RATING:

Rated 120 or 240 Vac, 60 Hz, 20 A

CONSTRUCTION DETAILS:

The product shall be constructed in accordance with the following description.

Flammability - The hood interior and the exhaust system or ducting integral to the hood are constructed of nonflammable materials or materials Classified by UL as having a flame spread index of 25 or less when tested in accordance with ASTM E84, Test for Surface Burning Characteristics of Building Materials.

Electrical Spacing - (Line voltage). Spacing through air and over the surface of insulating material are provided between (A) bare live parts and grounded parts, (B) bare live parts of opposite polarity or of surface circuits; and (C) bare line- and low-voltage parts, inches:

Potential Involved, (RMS)	Through Air	Over Surface
0-50	3/64	3/64
51-150	1/16	1/16

Internal Wiring - Unless otherwise specified, all internal wiring is Recognized Component AWM (AVLV2), insulation 1/32 in. thick minimum, rated 300 V, 105°C, No. 12 AWG THHN minimum.

Electrical Tubing and Sleeving - Recognized Component Tubing (YDPU2) and/or sleeving (UZFT2) rated 90 deg. C minimum.

Work Surface - (Optional) - Epoxy manufactured by Durcon shall have a 0.375 in. (9.5 mm) recess in surface or a curb across the front of the hood. All joints between the work surface and the sides, back and curb are to be sealed. Employed on bench-top types only. Worksurface material has been additionally-evaluated in accordance with Standard Method of Test of Surface Burning Characteristics of Building Materials, NFPA 255; Small Flame Impingement (UL 1805, Cl. 14); Chemical Resistance Test (UL 1805, Cl. 15); Resistance to Impact (UL 1805, Cl. 16).

Wire Routing - Wires (when provided) are routed away from sharp edges, moving parts, and uninsulated parts of opposite polarity and other circuits by means of cable ties and cable straps. When wiring passes through openings in sheet metal the openings are provided with nylon pass-through bushings or edges are smooth and well-rounded.

Electrical Connections - All electrical connections are made mechanically secured before soldering; or wiring terminates in Listed closed-loop type, upturned end type, turned in end type, or male/female quick-disconnect type terminals with positive engagement.

Corrosion Protection - All ferrous metal parts are suitably protected against corrosion by painting, plating or the equivalent.

Hood Service Controls - All controls for hood service (air, vacuum, gas, etc.) are located external to the hood and within easy reach.

Marking - Markings shall be permanent.

Exception: Labels that are not required (i.e., decoration or feature identification) need not comply with these requirements.

If Hood is pre-wired by manufacturer, marking consists of manufacturer, model series number, electrical ratings, and date code.

Convenience receptacle(s) provided on risers shall be marked with the following on each riser where convenience receptacles are employed: "20 A max" or equivalent.

The Service Control Center area is only intended for installations where it does not form part of the building air-handling space since there are receptacles and power cords provided in the SCC.

The units are marked with the Trademark "Fisher American".

List of Illustrations:

- Ill. 1 - 4 ft. bench top fume hood
- Ill. 2 - 6 ft. bench top fume hood
- Ill. 3 - 8 ft. bench top fume hood
- Ill. 4 - 10 ft. bench top fume hood
- Ill. 5 - 6 ft. walk-in fume hood
- Ill. 6 - 8 ft. walk-in fume hood
- Ill. 7 - 10 ft. walk-in fume hood

and Report

Bench Top Fume Hoods

General - The general design, shape and arrangement of parts shall be as illustrated except where variations are specifically described. Refer to Ills. 1-4 for mechanical drawings.

1. Outer Hood Enclosure - 16 and 18 Ga. painted or galvanized steel. Refer to Ills. 1 - 4 for overall dimensions. Bypass vent openings are provided on the hood front top face as noted: 4 ft.: 6 columns of 10 slots where each slot measures 5 by 0.2 inches; 6 ft.: 10 columns of 10 slots where each slot measures 5 by 0.2 inches; 8 ft.: 10 columns of 10 slots where each slot measures 5 by 0.2 inches; 10 ft.: 2 sets of 7 columns of 10 slots where each slot measures 5 by 0.2 inches.
2. Liners/Baffles: R/C (QMFZ2.E31703) Type CR-900 manufactured by Polyply Composites LLC, 4.6-5.0 mm thick (Evaluated for flame spread, chemical resistance, flame impingement and impact resistance in accordance with UL1805. Refer to Illustrations 1 - 4 for baffle positions and dimensions and air gaps.
3. Exhaust Outlet - 4 ft. hoods: one 6 x 15 in. rectangular opening; 6 ft. hoods: one 6 x 23 in. rectangular opening; 8 ft. hoods: one 6 x 36 in. rectangular opening; 10 ft. hoods: two 6 x 19.5 in. rectangular opening where each opening is spaced 29.75 in. from each outer edge of hood.
4. Service Fixtures and Controls - (Optional) - Constructed of brass. May be provided for air, water, steam, vacuum, gas, etc. Nozzles are located at least 6 in. from face of hood. Handles, valves and copper tubing can be provided for installation on site. All controls are located on side posts, exterior to the hood. Handles are marked with color-coded plastic inserts identifying the particular service.
5. Duplex Receptacle - Listed/Certified, rated 120 or 240 V, 20 A. Mounted in Listed/Certified 2-1/2 in. deep switch box secured to enclosure with screws provided with Listed/Certified faceplate.
6. Light Switch - Listed/Certified, rated 120/277 V, 20 A. Mounted in Listed/Certified 2-1/2 in. deep switch box secured to enclosure with screws provided with Listed/Certified faceplate.
7. Informational Marking - For pre-wired units-Consists of the following: Company name, model number, date code, and electrical ratings including volts, duplex current or watts, and cabinet current or watts.

For units not prewired, units consists of the following: company name, model number, date code and "All Hoods not Prewired at National Laboratories are to be wired at site in accordance with all applicable NEC and local codes."
8. Cabinet (Optional) - May or may not be provided with painted steel cabinet construction. Refer to Ills. 1 - 4 for dimensions when provided.
9. Sash - The hood sash glazing material is of laminated safety glass or tempered type, complying with ANSI Z97.1. It is free-moving, and counterbalanced to remain stationery at any position.

Walk-In Fume Hoods

General - Walk-In Fume Hoods are constructed identically as noted for Bench Top Fume Hoods except where explicitly noted below. Refer to Ills. 5 - 7 for mechanical drawings.

1. Outer Hood Enclosure - 16 and 18 Ga. painted or galvanized steel. Refer to Ills. 5 - 7 for overall dimensions. Bypass vent openings are provided on the hood front top face with 14 columns of 9 slots where each slot measures 5 by 0.2 inches.
2. Liners/Baffles: R/C (QMFZ2.E31703) Type CR-900 manufactured by Polyply Composites LLC, 4.6-5.0 mm thick (Evaluated for flame spread, chemical resistance, flame impingement and impact resistance in accordance with UL1805. Refer to Illustrations 5 - 7 for baffle positions and dimensions and air gaps.
3. Exhaust Outlet - 6 ft. hoods: one 6 x 23 in. rectangular opening; 8 ft. hoods: two 6 x 19.5 in. rectangular opening where each opening is spaced 24.625 in. from each outer edge of hood; 10 ft. hoods: two 6 x 23 in. rectangular opening where each opening is spaced 36 in. from each outer edge of hood.
4. Service Fixtures and Controls - (Optional) - Constructed of brass. May be provided for air, water, steam, vacuum, gas, etc. Nozzles are located at least 6 in. from face of hood. Handles, valves and copper tubing can be provided for installation on site. All controls are located on side posts, exterior to the hood. Handles are marked with color-coded plastic inserts identifying the particular service.
5. Duplex Receptacle - Listed/Certified, rated 120 or 240 V, 20 A. Mounted in Listed/Certified 2-1/2 in. deep switch box secured to enclosure with screws provided with Listed/Certified faceplate.
6. Light Switch - Listed/Certified, rated 120/277 V, 20 A. Mounted in Listed/Certified 2-1/2 in. deep switch box secured to enclosure with screws provided with Listed/Certified faceplate.
7. Informational Marking - For pre-wired units-Consists of the following: Company name, model number, date code, and electrical ratings including volts, duplex current or watts, and cabinet current or watts.

For units not prewired, units consists of the following: company name, model number, date code and "All Hoods not Prewired at National Laboratories are to be wired at site in accordance with all applicable NEC and local codes."
8. Cabinet (Optional) - Not provided.
9. Sash - The hood sash glazing material is of laminated safety glass or tempered type, complying with ANSI Z97.1. It is free-moving, and counterbalanced to remain stationery at any position.

SERVICE CONTROL CENTER

1. Duplex Receptacles (Optional) - Listed/Certified, rated 125 or 250 V, 20 A. Secured with screws, located external to the hood.

Alternate - GFCI Receptacles- Listed/Certified rated 125 or 250 V 20 Amps. Located internal to the hood.

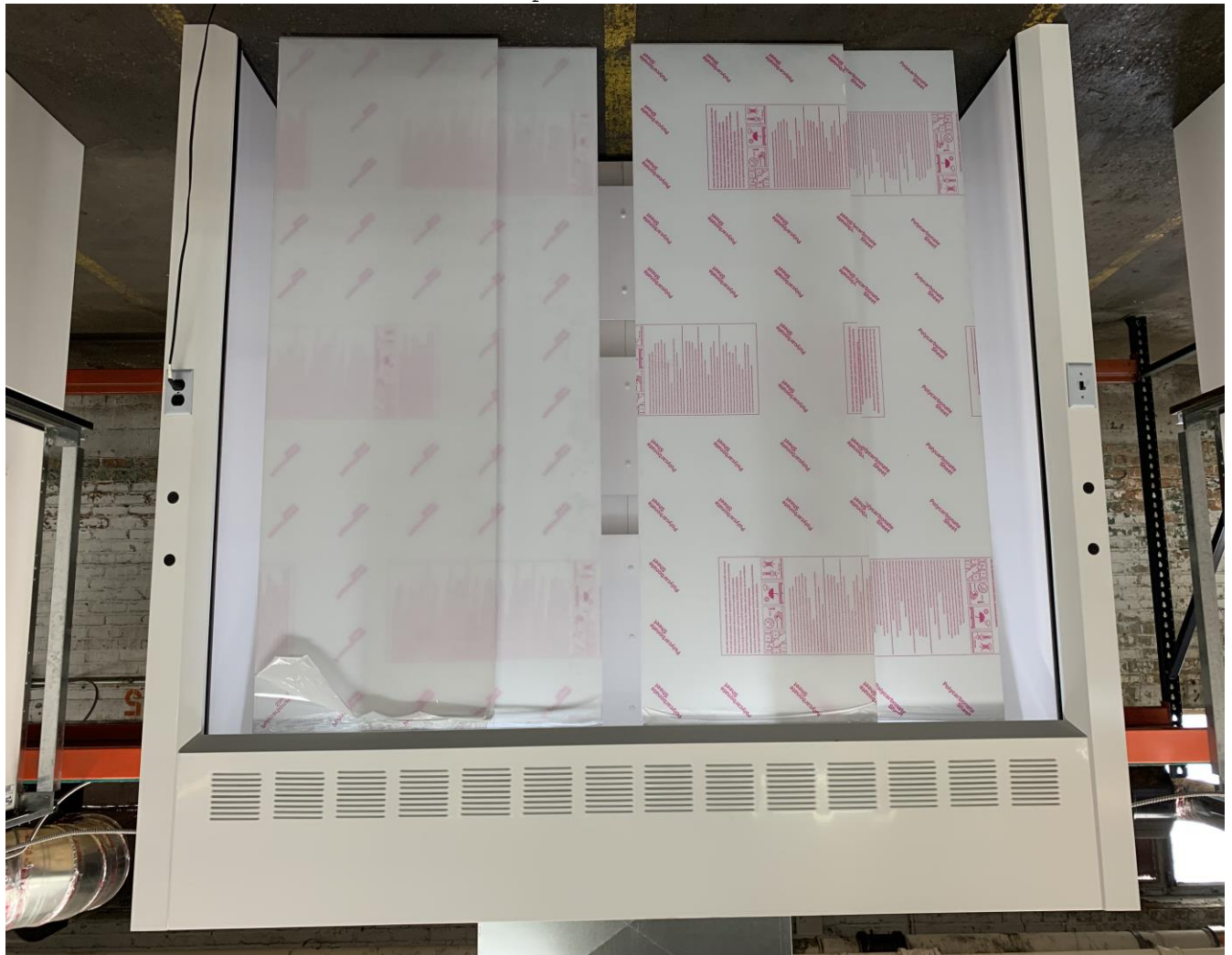
3. Receptacle - Listed/Certified, rated 125 or 250 V, 20 A. Secured with screws, located external to the hood.
4. LED Light Fixture - Listed (QOVZ) micro LED Light rated 120 Vac, 60 Hz, 4 W.
5. Light Cover - The light cover is of laminated safety glass or tempered type, complying with ANSI Z97.1. Secured via R/C (QOQW2) silicone RTV adhesive rated 80 deg. C min.
6. Internal Wiring - R/C (AVLV2)/Certified AWM rated 300 V min, 16 Ga., 90 deg. C min.
7. Junction Box - Listed/Certified 4 in. square box, 2-1/8 in. deep junction box. Provided with a Listed cover.

Listed/Certified cut out boxes (use to enclose control circuit components).
8. Conduit - Listed/Certified Type MC armored cable rated 600 V, 90 deg. C provided with 12 AWG
9. Conduit Fittings - Listed/Certified types suitable for knockout trade sizes of junction box.

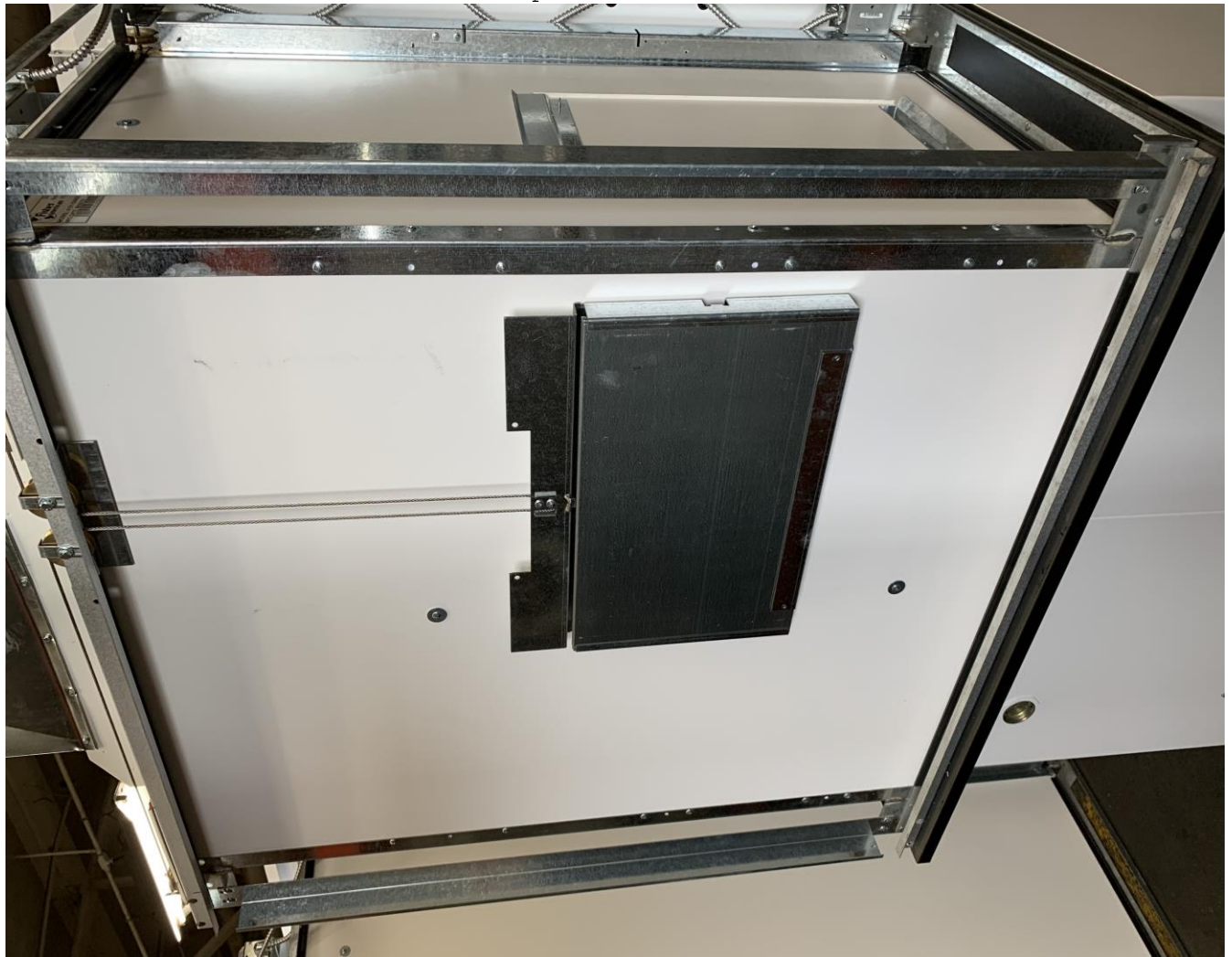




The Acid and Flammable Storage Cabinets were not evaluated as part of the models by this report.



















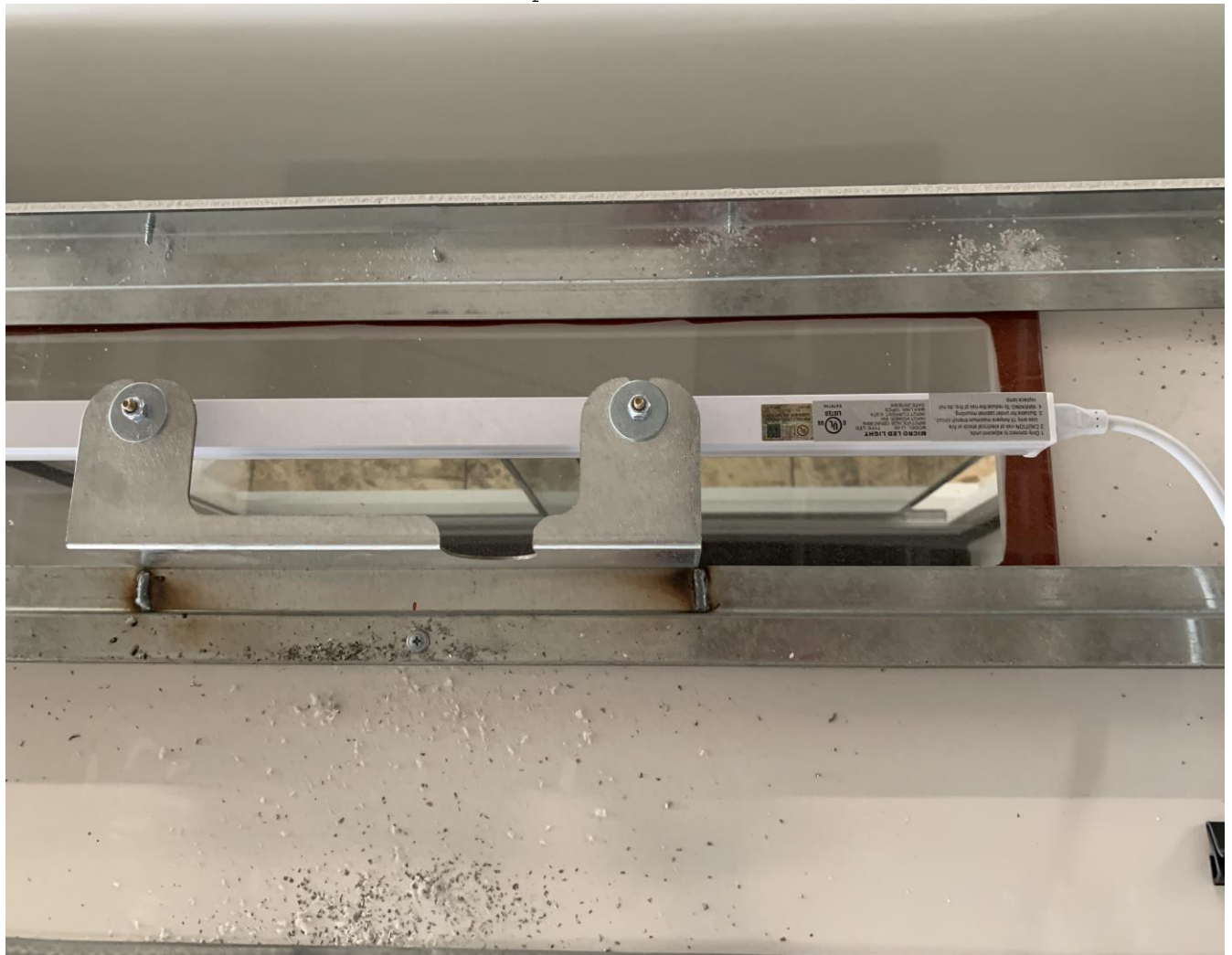


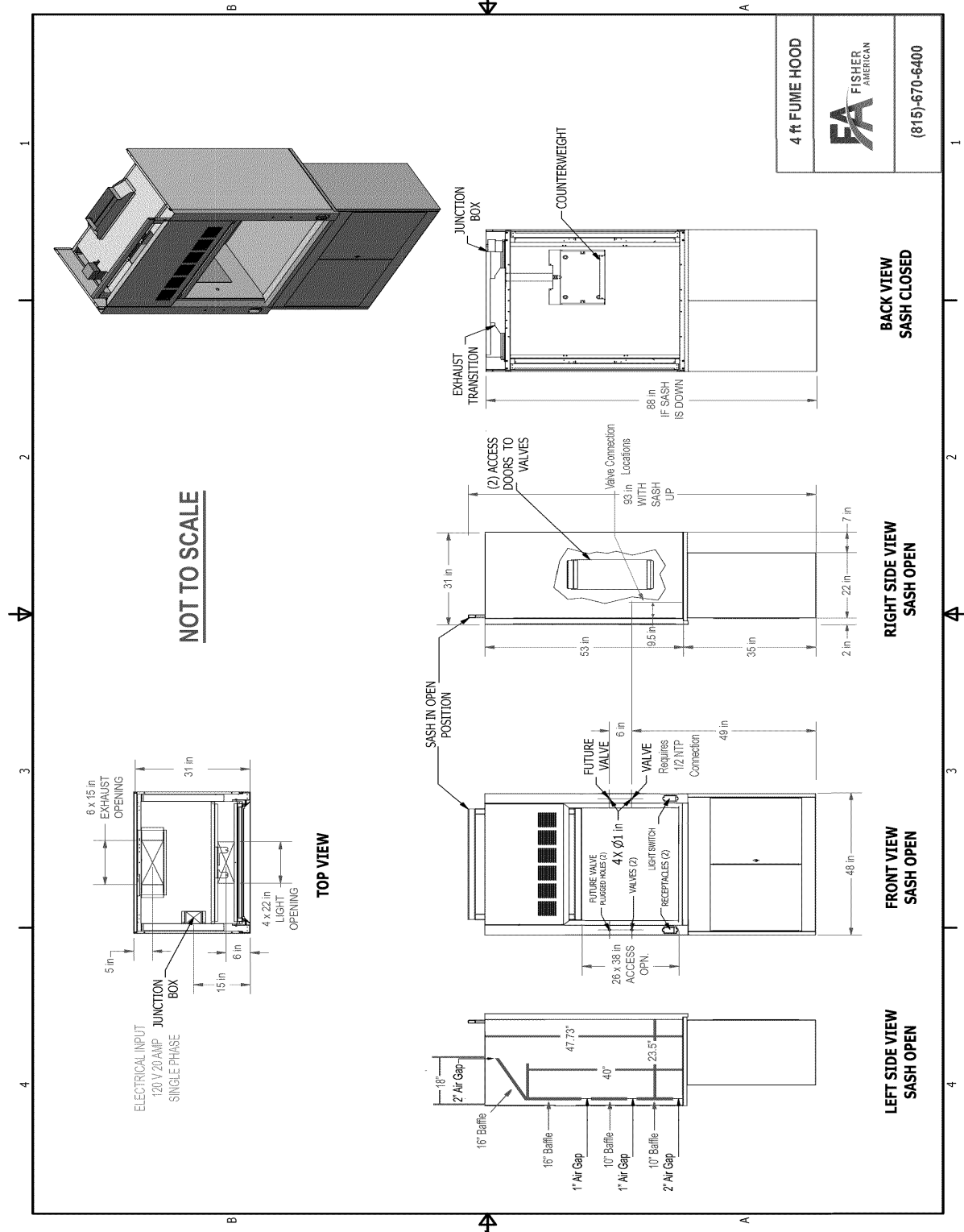


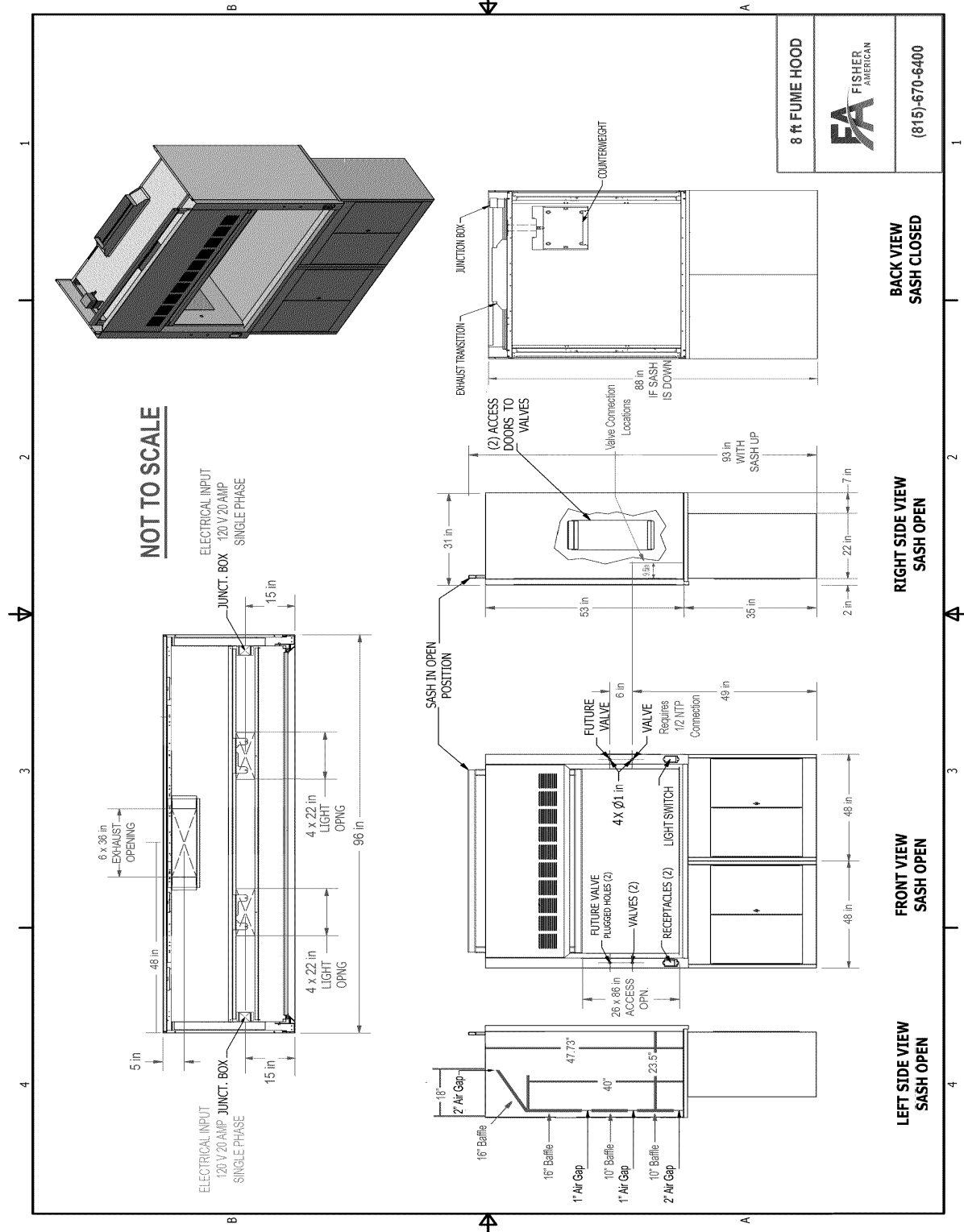


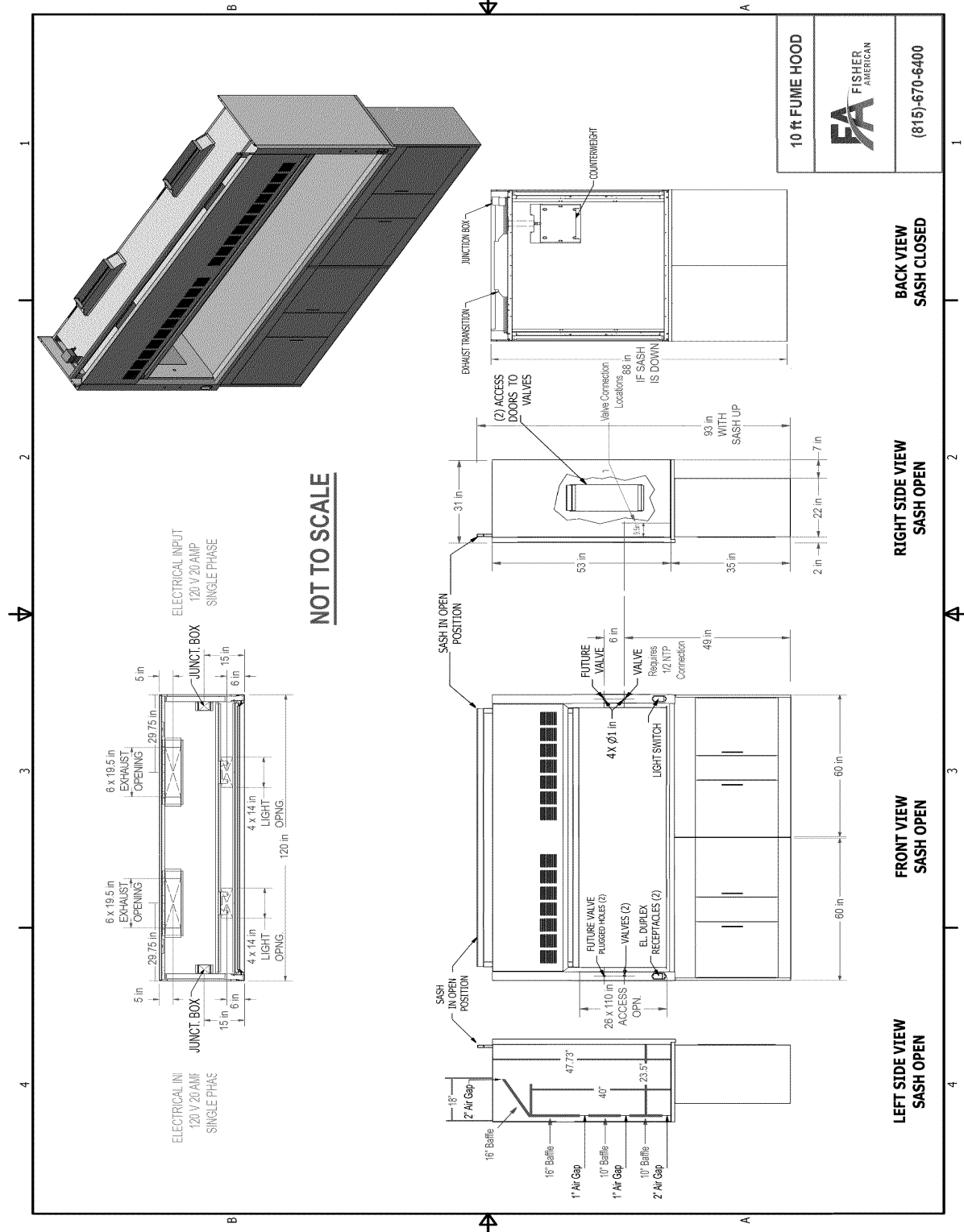


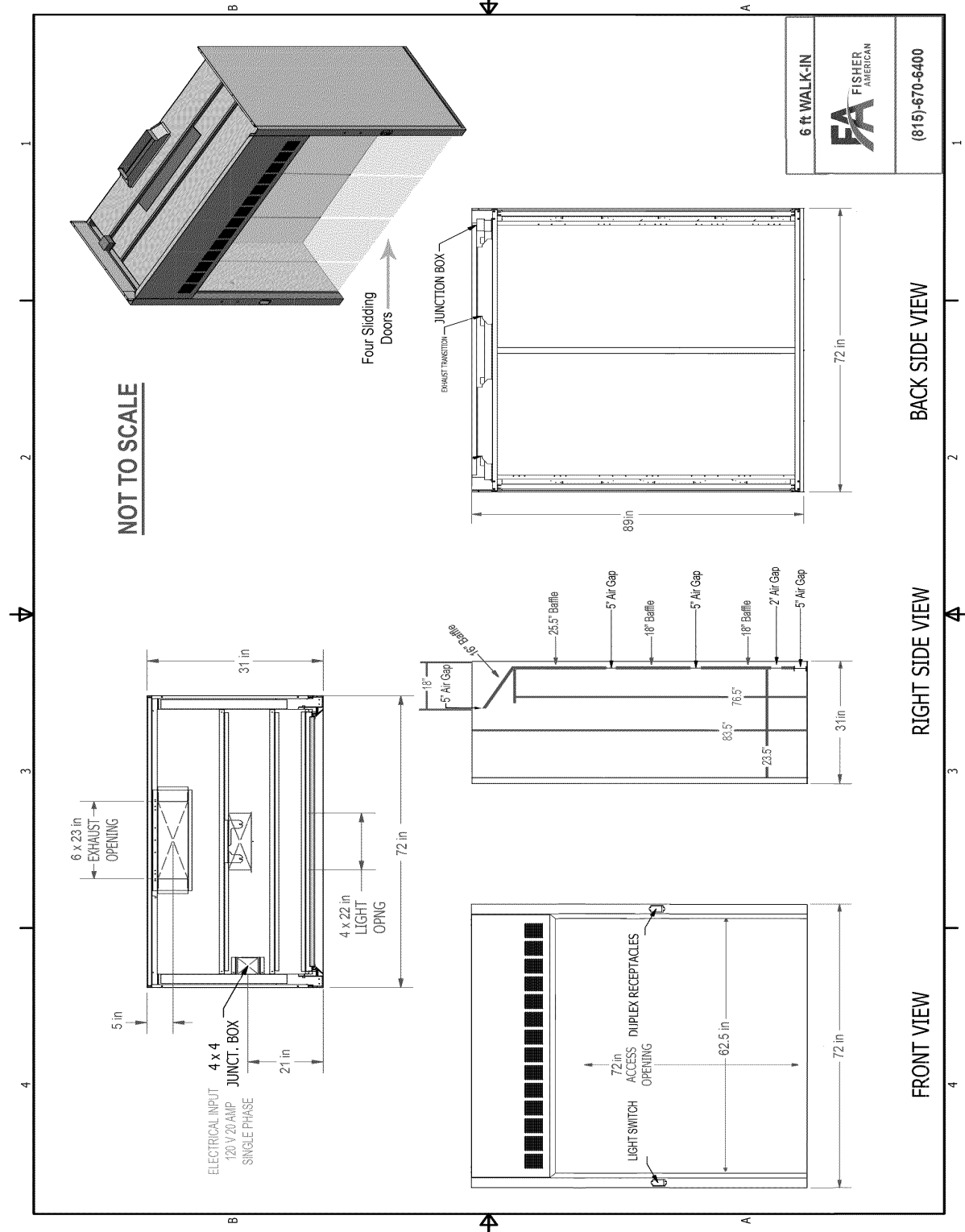


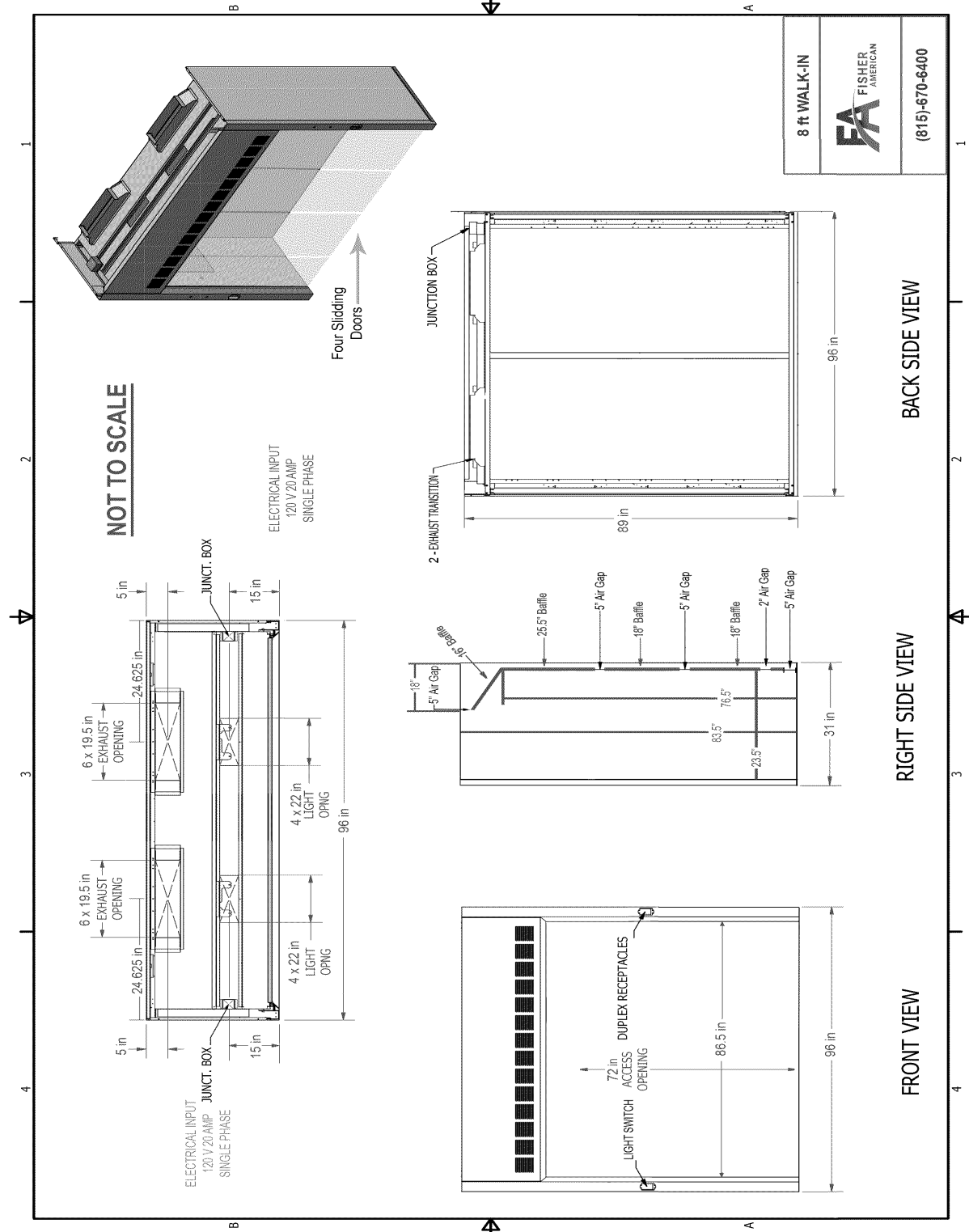


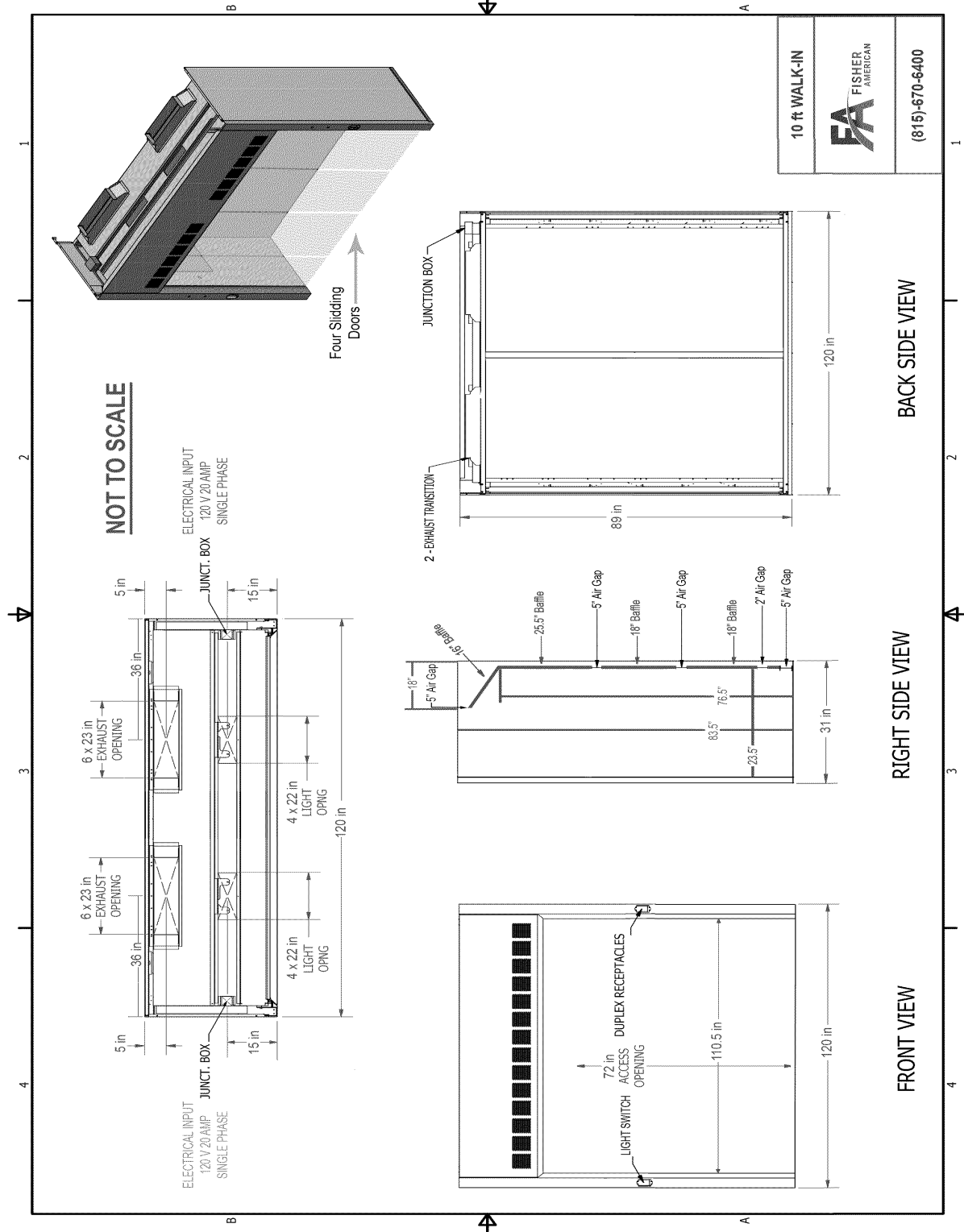












TEST RECORD NO. 1

SAMPLES:

Samples of the fume hood Models w-dd-t-xxxx , where "w" can be 3, 4, 5, 6 or 8 in width in feet; "dd" can be 32, 38, 48 or 72 in depth in inches; where "t" can be E, S or W denoting the worksurface as Epoxy, Solid or Walk-in; where "xxxx" denote the valve types. covered by this Report have been found to comply with the requirements of the following Standards in effect as of this Report.

Models 8-31-EXXXX-XX, 4-31-EXXXX-XX and 8-31-WXXXX-XX were used for test purposes and considered representative of the entire series.

GENERAL:

Test results relate only to the items tested.

Testing of the liner/baffle material CR-900 manufactured by Polyply Composites was not deemed necessary due to the UL R/C of the material having been previously evaluated in accordance with UL 1805 for Small Flame Impingement, Chemical Resistance, Impact and Flame Spread.

The following tests were conducted.

Resistance To Impact - Sash Frame And Track:	UL 1805, Cl. 16.2
Face Velocity Profile:	UL 1805, Cl. 17.4
Air Flow Direction:	UL 1805, Cl. 17.7
Surface Burning Characteristics	UL 1805, Cl. 5.1
Small Flame Impingement	UL 1805, Cl. 14
Corrosion Resistance - Liner Materials	UL 1805, 15
Resistance to Impact - Work Surface	UL 1805,16.4

Testing of the Surface Burning Characteristics in accordance with UL 723, 11th Ed. was considered representative of UL 1805, Cl. 5.1.

The test methods and results of the above tests have been reviewed and found in accordance with the requirements in the Standard for Laboratory Hoods and Cabinets, UL 1805 First Edition.

Test Record Summary:

The results of this investigation, including construction review and testing, indicate that the products evaluated comply with the applicable requirements in the standards noted below and, therefore, such products are judged eligible to bear UL's Mark as described on the Conclusion Page of this Report.

Standard Reference	Title	Edition or Issue Date
UL 1805	STANDARD FOR LABORATORY HOODS AND CABINETS	Edition 1 - Revision Date 2006/06/02

CONCLUSION

Samples of the products covered by this Report have been found to comply with the requirements covering the category and the products are found to comply with UL's applicable requirements. The description and test result in this Report are only applicable to the sample(s) investigated by UL and does not signify UL certification or that the product(s) described are covered under UL's Follow-Up Service Program. When covered under UL's Follow-Up Service Program, the manufacturer is authorized to use the UL Classification Mark on such products which comply with UL's Follow-Up Service Procedure and any other application requirements of Underwriters Laboratories Inc. The Classification Mark of Underwriters Laboratories Inc. on the product, or the UL symbol on the product and the Classification Mark on the smallest unit container in which the product is packaged, is the only method to identify products investigated by UL to published requirements and manufactured under UL's Classification and Follow-Up Service.

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