



One University Place
8801 J.M. Keynes Drive, Suite 240
Charlotte, North Carolina 28262
Phone 704-376-7072
www.cmta.com

PROJECT: Mooresville Selma Burke MS (Louisville VMGS20)
PROJECT NO: 221.083
SUBMITTAL: Submittal 233800-4.0 Kitchen Range Hood
DATE RECEIVED: March 4, 2022

Engineer's review is for conformance with the general design concept and for general arrangement only. Review and approval shall not be construed to mean that the engineer accepts the detail calculations and dimensions shown in the submittal or any deviation from the requirements of the contract documents. Contractor is responsible for errors or omissions in the submittal; for meeting all requirements of the contract documents; for confirming and correlating job site dimensions; for information that pertains solely to fabrication processes or to techniques of construction; and for the coordination of his work with all other trades.

DISPOSITION LEGEND

EI EXCEPTIONS INDICATED – RESUBMISSION NOT REQUIRED

Fabrications may proceed as per notations. If Contractor cannot comply with notation, resubmit item. Otherwise, resubmission is not required. Changes to contract or contract sum are not authorized.

Reviewer: Nick Rogers

Date: 03/29/2022

ITEM - DISPOSITION; COMMENT(S):

1. *Supply air collars differ from BOD. Coordinate duct runouts required with Mechanical contractor.*

END OF SHOP DRAWING REVIEW



Submittal Transmittal

LS3P | 227 West Trade Street Suite 700 Charlotte NC 28202 United States

PROJECT: MGSD Middle School 9201-201600 DATE SENT: 3/4/2022
 RETURN BY: 3/11/2022
 SUBJECT: Kitchen Range Hood SUBMITTAL ID: 233800-4-0
 TYPE: Submittal TRANSMITTAL ID: 00707
 PURPOSE: For Review and Comment VIA: Info Exchange
 SPEC SECTION: 233800

FROM

| NAME | COMPANY | EMAIL | PHONE |
|-----------------------|---------|-------------------------------|--------------|
| Jacquelyn Satterwhite | LS3P | JacquelynSatterwhite@ls3p.com | 704-333-6686 |

TO

| NAME | COMPANY | EMAIL | PHONE |
|----------------|---------|---------------------|--------------|
| Heather Maness | CMTA | cltsupport@cmta.com | 704-376-7072 |
| Scott Willard | CMTA | Swillard@cmta.com | 502-326-3085 |

REMARKS:

NOTE: Received 2 files from Procore at 11:49 AM EST on 03/04/2022. Any changes made to the Submittal in Procore after this time are not shown in Newforma.

Procore Due Date:
03/18/2022

General Description:

Workflow Comments:

DESCRIPTION OF CONTENTS

| QTY | DATED | TITLE | NUMBER | NOTES |
|-----|----------|---|--------|-------|
| 1 | 3/4/2022 | 23 38 00-4 - Kitchen Range Hood-PD-SD-REV.pdf | | |
| 1 | 3/4/2022 | 233800-4-0 - Submittal Form.pdf | | |



Submittal #233800-4.0 233800 - VENTILATION HOODS

Barnhill Contracting Company
706 Main Ave. NW
Hickory, North Carolina 28601
Phone: (828) 330-7126

Project: 15000420 - SELMA BURKE MIDDLE SCHOOL
235 Rinehardt Road
Mooresville, North Carolina 28115

233800 : Kitchen Range Hood

| | | | |
|--------------------------------|--|---------------------------|--|
| SPEC SECTION: | 233800 - VENTILATION HOODS | SUBMITTAL MANAGER: | Logan Ridenhour (BARNHILL CONTRACTING COMPANY) |
| STATUS: | Open | DATE CREATED: | 03/4/2022 |
| ISSUE DATE: | | REVISION: | 0 |
| RESPONSIBLE CONTRACTOR: | ACTION MECHANICAL CONTRACTORS | RECEIVED FROM: | Commie Pendergrass |
| RECEIVED DATE: | | SUBMIT BY: | |
| FINAL DUE DATE: | 03/18/2022 | LOCATION: | |
| SUB JOB: | | COST CODE: | |
| APPROVERS: | Logan Ridenhour (BARNHILL CONTRACTING COMPANY), Michael Gaffney (LS3P ASSOCIATES, LTD), Jacquelyn Satterwhite (LS3P ASSOCIATES, LTD) | | |

BALL IN COURT:
Michael Gaffney (LS3P ASSOCIATES, LTD), Jacquelyn Satterwhite (LS3P ASSOCIATES, LTD)

DISTRIBUTION:
Michael Royal (MOORESVILLE GRADED SCHOOL DISTRICT), Logan Ridenhour (BARNHILL CONTRACTING COMPANY), Kevin Richey (CMTA), Kyle Novak (LS3P ASSOCIATES, LTD), David Martin (MOORESVILLE GRADED SCHOOL DISTRICT), Tim Ignasiak (BARNHILL CONTRACTING COMPANY), Trevor Holmes (LS3P ASSOCIATES, LTD), Reiland Funderburk (BARNHILL CONTRACTING COMPANY), Craig Davis (BARNHILL CONTRACTING COMPANY), Support CMTA (CMTA)

DESCRIPTION:

ATTACHMENTS:

Subcontractor warrants the following:

- We have personally investigated the proposed product and determined that it is equal in all respects to that specified and/or performance specification requirements.
- We will provide the specified guarantee for this product.
- We will coordinate installation of this product into the work, making such changes as may be required for the work to be complete in all aspects.
- We have clearly indicated by marking as "Non-Complying Feature" each and every requirement of the specifications that this product does not meet.
- And, we waive all claims for additional costs related to this product which subsequently become apparent.

SUBMITTAL WORKFLOW

| NAME | SUBMITTER/ APPROVER | SENT DATE | DUE DATE | RETURNED DATE | RESPONSE | ATTACHMENTS | COMMENTS |
|-----------------------|---------------------|-----------|-----------|---------------|----------|---|----------|
| Logan Ridenhour | Approver | | 3/4/2022 | 3/4/2022 | Approved | 23 38 00-4 - Kitchen Range Hood-PD-SD-REV.pdf | |
| Michael Gaffney | Approver | 3/4/2022 | 3/18/2022 | | Pending | | |
| Jacquelyn Satterwhite | Approver | 3/4/2022 | 3/18/2022 | | Pending | | |

BY _____ DATE _____ COPIES TO _____

Selma Burke Middle School

SUBMITTAL DATA

Date: March 4, 2022

Item: Kitchen Hood, Fans & UDS

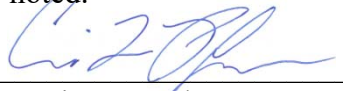
Specification #: 23 XX XX

AMCI Submittal#: _____ M-27

Contractor:

Action Mechanical Contractors, Inc.
3228 Nevada Blvd
Charlotte, NC 28273
Phone: (704) 587-4450
Fax: (704) 587-4451

This submittal has been reviewed and appears to be in compliance with the specifications, unless otherwise noted.

Signed: 

Commie L. Pendergrass
Project Manager

Owner: Mooresville Graded School District
Mooresville, NC

Architect: LS3P Associates
227 W. Trade St; Suite 700
Charlotte, NC 28202

Construction Mgr: Barnhill Contracting Co.
706 Main Ave NW
Hickory, NC 28601

~~Subcontractor~~/Supplier: Hoffman & Hoffman, Inc.

Manufacturer: Greenheck Fan Corp

Comments/Notes:

| | |
|---------------------------|------------------|
| Date | January 17, 2022 |
| Hoffman & Hoffman Order # | 125.351.11082 |
| Branch Office | Charlotte, NC |
| Salesman | Spencer Jones |



PROJECT: Selma Burke Middle School
Mooreville, NC

CONTRACTOR: Action Mechanical
Charlotte, NC

ENGINEER: CMTA
Prospect, KY

EQUIPMENT: Kitchen Hoods, Fans, and UDS by Greenheck

S
U
B
M
I
T
T
A
L

General Notes: *Above per the attached data and cut sheets*

- 1) All sizing, performance, and voltages to be confirmed
- 2) All UDS hookups to be verified
- 3) Drawings show the UDS a shorter length than the hoods. However it is recommend that the UDS go the full length of the hoods (including the additional length of the utility cabinets). Please veify and confirm UDS sizing

FOR APPROVAL

| | | |
|---|---|---|
| HOFFMAN & HOFFMAN, INC. HVAC Manufacturers Representative Website: www.hoffman-hoffman.com | | We have exercised care in the preparation of this submittal. We believe it satisfies our interpretation of the designer's intent and scope. It contains the list of materials, quantities, sizes, style and the finish as we propose to furnish for this job. Please examine and check carefully that all items are exactly as required and that our interpretation of the applicable plans and/or specifications are consistent with the design. Approval by the engineer and purchaser will be required before release of this equipment for production. If any discrepancies are discovered, please notify us as soon as possible. |
| Asheville, NC (828) 252-5782 Charlotte, NC (704) 364-4700 Raleigh, NC (919) 781-8011 Wilmington, NC (910) 791-4775 Chattanooga, TN (423) 693-2890 Knoxville, TN (865) 450-9770 Corporate: Greensboro, NC (336) 292-8777 | Charleston, SC (843) 884-3201 Columbia, SC (803) 765-9360 Greenville, SC (864) 676-1888 Chesapeake, VA (757) 548-1700 Richmond, VA (804) 272-1500 Roanoke, VA (540) 725-8701 | |

GHEW Type 1, Baffle Filter Single Wall - Exhaust Only Wall Canopy

| Model | Hood Length (in.) | Width (in.) | Bottom Width (in.) | Height (in.) | | Exhaust Volume (CFM) | Exhaust Rate (CFM) | Exhaust SP (in. w.g.) | Double Island |
|-------|-------------------|-------------|--------------------|--------------|------|----------------------|--------------------|-----------------------|---------------|
| | | | | Front | Back | | | | |
| GHEW | 144 | 66 | 66 | 24 | 24 | 2400 | 200 | 0.374 | No |

Selected Options & Accessories:

| Option or Accessory | Description |
|------------------------------|--|
| Mounting Height | 80 in. off Finished Floor. |
| Integral Air Space | Factory Mounted on Back - 3" wide 39 lbs |
| Ceiling Enclosures | 24 in. High on Left Front Right |
| Filter Type | Stainless Steel Baffle Filters 40 lbs |
| Filter Removal Tool | Easy reach tool for filter removal. |
| Exhaust Air Balancing Baffle | Damper used to balance system with multiple collars. |

Material: 300 Series SS 100% Construction
 (Hanger brackets and seam covers - galvanized steel)
UL Listing: UL 710 w/out Exhaust Fire Damper

Features:
 Performance Enhancing Lip (PEL)
 Standing Seam Construction for Superior Strength

Section Data:

| Section Num. | Length (in.) | Volume (CFM) | SP (in. wg) | Filter Qty | | Filter Ht. (in.) | Cooking Load | Light Qty | Light Type | Foot Candles | Drain Location | Hood Weight (LBS) |
|--------------|--------------|--------------|-------------|------------|-------|------------------|--------------|-----------|--------------------|--------------|----------------|-------------------|
| | | | | 16" W | 20" W | | | | | | | |
| 1 | 144 | 2400 | 0.374 | 4 | 4 | 20 | Heavy | 4 | Incandescent / CFL | 43.67 | Left/Right | 374.55 |

Exhaust Collar Data:

| Section Num. | Collar Num. | Collar Size (LxW) in. or Diameter (in.) | Pos. Off Left (in.) | Pos Off Back (in.) | Velocity (fpm) | Mounting Option |
|--------------|-------------|---|---------------------|--------------------|----------------|-----------------------------------|
| 1 | 1 | 23 x 10 | 72 | 7 | 1503 | Factory Mounted Exhaust Collar(s) |

External Supply Plenum Data:

Supply: 1920 CFM MUA: 1920 CFM AC: 0 CFM

| Section Num. | Plenum Num. | Side | Type | Length (in.) | Width (in.) | Height (in.) | Volume (CFM) | SP (in. wg) | Insulated | MBD | LED Lights |
|--------------|-------------|-------|--------------------------|--------------|-------------|--------------|--------------|-------------|-----------|-----|------------|
| 1 | 1 | Front | Air Curtain Supply (ASP) | 156 | 14 | 10 | 1920 | 0.10 | No | Yes | No |

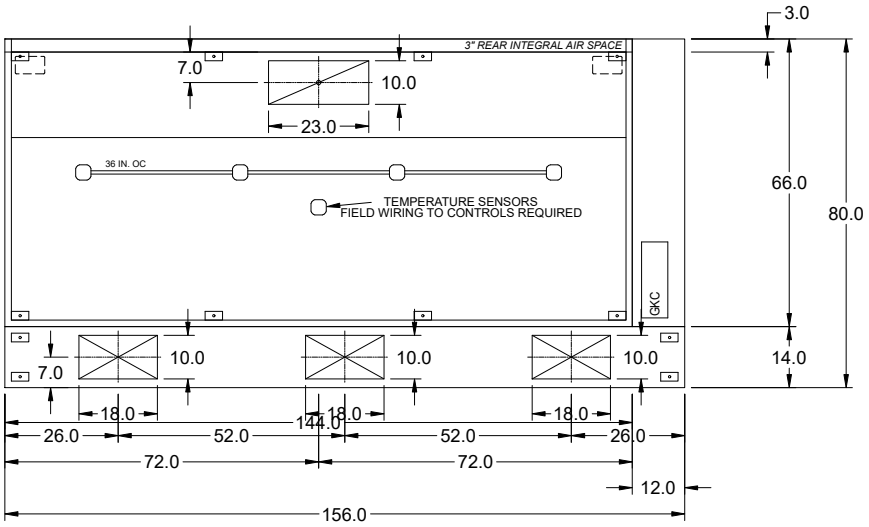
External Supply Collar Data:

| Section Num. | Plenum Num. | Side | Collar Num. | Collar Size (LxW) in. or Diameter (in.) | Pos. Off Left (in.) | Pos. Off Front (in.) | Velocity (fpm) | Mounting Option |
|--------------|-------------|-------|-------------|---|---------------------|----------------------|----------------|----------------------------------|
| 1 | 1 | Front | 1 | 18 x 10 | 26 | 7 | 512 | Factory Mounted Supply Collar(s) |
| 1 | 1 | Front | 2 | 18 x 10 | 78 | 7 | 512 | Factory Mounted Supply Collar(s) |
| 1 | 1 | Front | 3 | 18 x 10 | 130 | 7 | 512 | Factory Mounted Supply Collar(s) |

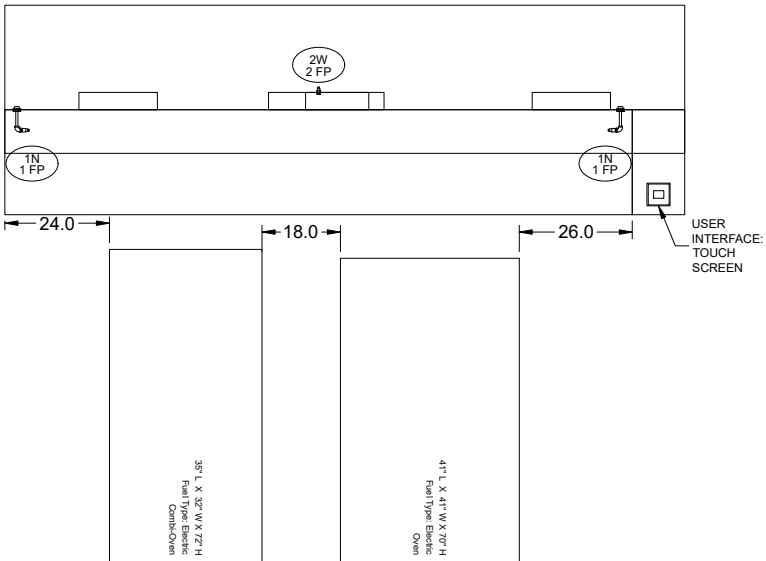
Utility Cabinet Data:

| Descripton | Length (in.) | Width (in.) | Height (in.) | Weight (lbs) |
|-----------------------|--------------|-------------|--------------|--------------|
| Right Utility Cabinet | 66 | 12 | 24 | 75.5 |

Provide UDS drawings for review prior to fabrication.



MARK: KH-1 - SECTION 1
PLAN VIEW

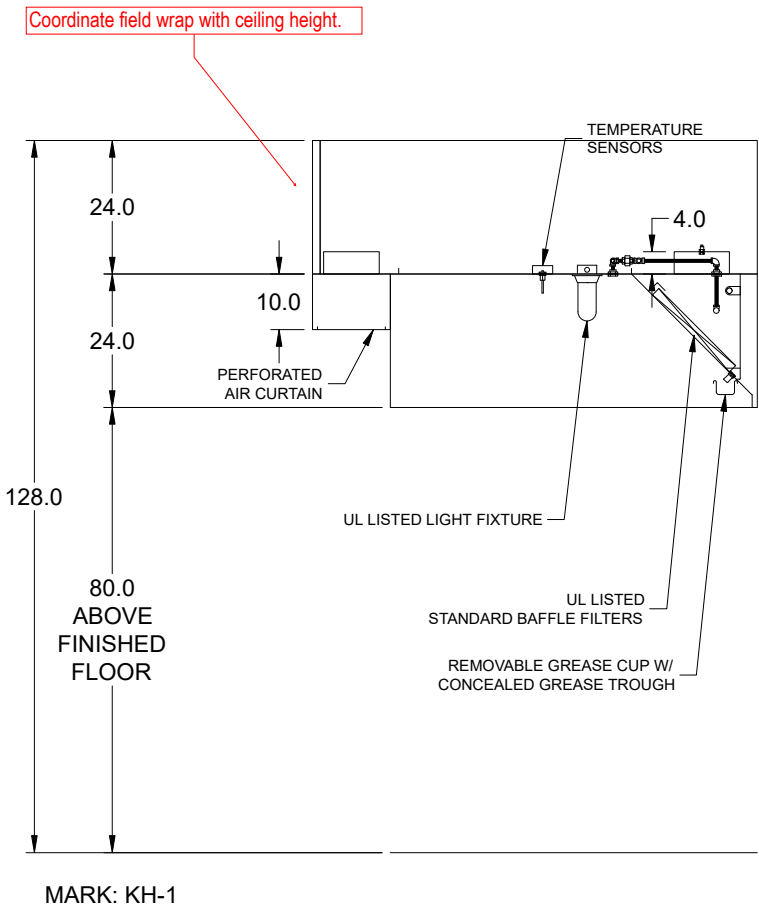


MARK: KH-1 - SECTION 1
ELEVATION VIEW

NOTE: All dimensions are in units of in.

| Hanger Bracket Locations | | | |
|--------------------------|--------|------------------------|-------------------------|
| Sec # | Brkt # | Distance Off Left (in) | Distance Off Front (in) |
| 1 | 1 | 3.50 | 2.50 |
| 1 | 2 | 47.95 | 2.50 |
| 1 | 3 | 95.90 | 2.50 |
| 1 | 4 | 140.50 | 2.50 |
| 1 | 5 | 3.50 | 62.00 |
| 1 | 6 | 47.95 | 62.00 |
| 1 | 7 | 95.90 | 62.00 |
| 1 | 8 | 140.50 | 62.00 |

| Bracket Mounting Position for an 8 Bracket Hood | | | |
|---|---|---|---|
| 5 | 6 | 7 | 8 |
| BACK | | | |
| 1 | 2 | 3 | 4 |
| FRONT | | | |



NOTE: All dimensions are in units of in.



GHEW Type 1, Baffle Filter Single Wall - Exhaust Only Wall Canopy

| Model | Hood Length (in.) | Width (in.) | Bottom Width (in.) | Height (in.) | | Exhaust Volume (CFM) | Exhaust Rate (CFM) | Exhaust SP (in. w.g.) | Double Island |
|-------|-------------------|-------------|--------------------|--------------|------|----------------------|--------------------|-----------------------|---------------|
| | | | | Front | Back | | | | |
| GHEW | 144 | 66 | 66 | 24 | 24 | 2400 | 200 | 0.374 | No |

Selected Options & Accessories:

| Option or Accessory | Description |
|---------------------|--|
| Mounting Height | 80 in. off Finished Floor. |
| Integral Air Space | Factory Mounted on Back - 3" wide 39 lbs |
| Ceiling Enclosures | 24 in. High on Left Front Right |
| Filter Type | Stainless Steel Baffle Filters 40 lbs |
| Filter Removal Tool | Easy reach tool for filter removal. |

Material: 300 Series SS 100% Construction
(Hanger brackets and seam covers - galvanized steel)
UL Listing: UL 710 w/out Exhaust Fire Damper

Features:
Performance Enhancing Lip (PEL)
Standing Seam Construction for Superior Strength

Section Data:

| Section Num. | Length (in.) | Volume (CFM) | SP (in. wg) | Filter Qty | | Filter Ht. (in.) | Cooking Load | Light Qty | Light Type | Foot Candles | Drain Location | Hood Weight (LBS) |
|--------------|--------------|--------------|-------------|------------|-------|------------------|--------------|-----------|--------------------|--------------|----------------|-------------------|
| | | | | 16" W | 20" W | | | | | | | |
| 1 | 144 | 2400 | 0.374 | 4 | 4 | 20 | Heavy | 4 | Incandescent / CFL | 43.67 | Left/Right | 374.55 |

Exhaust Collar Data:

| Section Num. | Collar Num. | Collar Size (LxW) in. or Diameter (in.) | Pos. Off Left (in.) | Pos Off Back (in.) | Velocity (fpm) | Mounting Option |
|--------------|-------------|---|---------------------|--------------------|----------------|-----------------------------------|
| 1 | 1 | 23 x 10 | 72 | 7 | 1503 | Factory Mounted Exhaust Collar(s) |

External Supply Plenum Data:

Supply: 1920 CFM MUA: 1920 CFM AC: 0 CFM

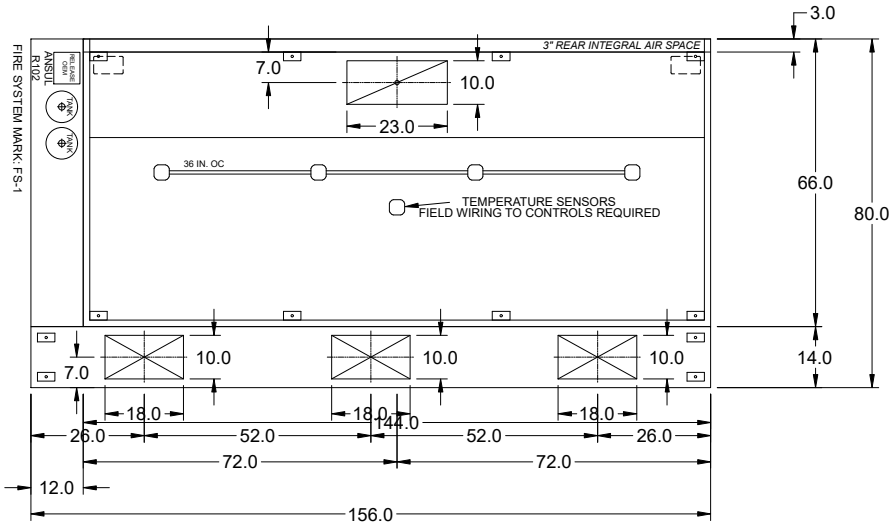
| Section Num. | Plenum Num. | Side | Type | Length (in.) | Width (in.) | Height (in.) | Volume (CFM) | SP (in. wg) | Insulated | MBD | LED Lights |
|--------------|-------------|-------|--------------------------|--------------|-------------|--------------|--------------|-------------|-----------|-----|------------|
| 1 | 1 | Front | Air Curtain Supply (ASP) | 156 | 14 | 10 | 1920 | 0.10 | No | Yes | No |

External Supply Collar Data:

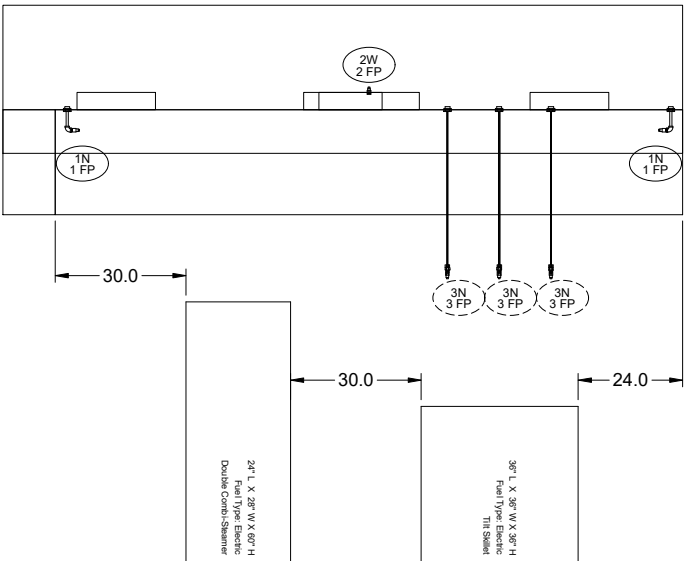
| Section Num. | Plenum Num. | Side | Collar Num. | Collar Size (LxW) in. or Diameter (in.) | Pos. Off Left (in.) | Pos. Off Front (in.) | Velocity (fpm) | Mounting Option |
|--------------|-------------|-------|-------------|---|---------------------|----------------------|----------------|----------------------------------|
| 1 | 1 | Front | 1 | 18 x 10 | 26 | 7 | 512 | Factory Mounted Supply Collar(s) |
| 1 | 1 | Front | 2 | 18 x 10 | 78 | 7 | 512 | Factory Mounted Supply Collar(s) |
| 1 | 1 | Front | 3 | 18 x 10 | 130 | 7 | 512 | Factory Mounted Supply Collar(s) |

Utility Cabinet Data:

| Descripton | Length (in.) | Width (in.) | Height (in.) | Weight (lbs) |
|----------------------|--------------|-------------|--------------|--------------|
| Left Utility Cabinet | 66 | 12 | 24 | 178.7 |



MARK: KH-2 - SECTION 1
PLAN VIEW

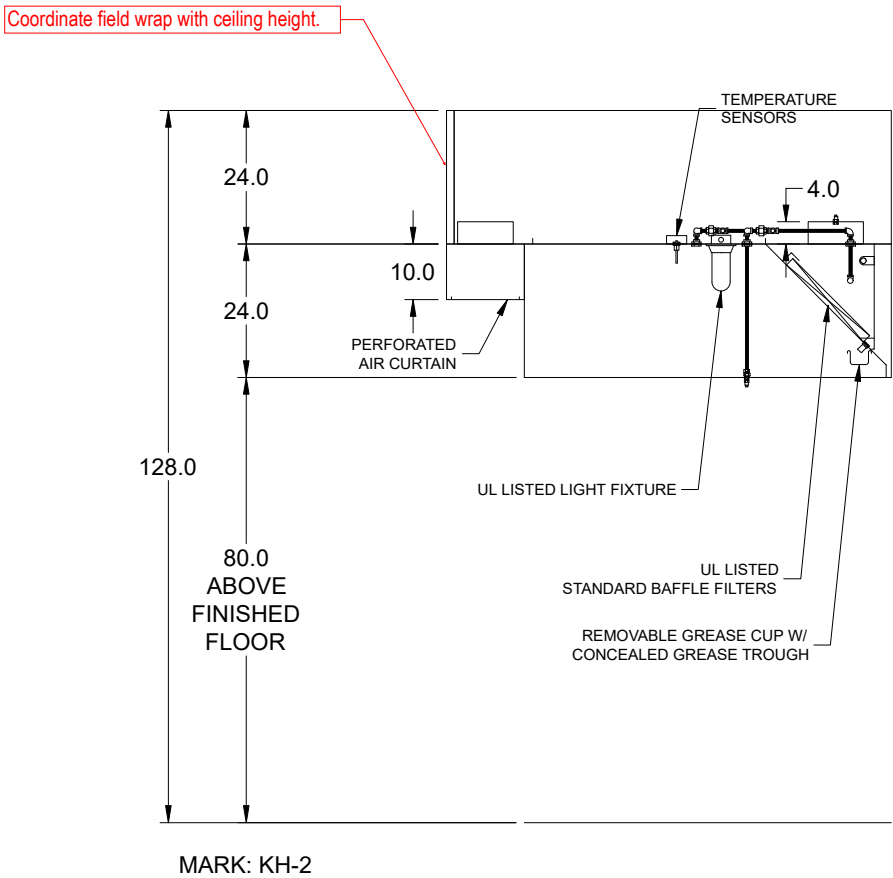


MARK: KH-2 - SECTION 1
ELEVATION VIEW

NOTE: All dimensions are in units of in.

| Hanger Bracket Locations | | | |
|--------------------------|--------|------------------------|-------------------------|
| Sec # | Brkt # | Distance Off Left (in) | Distance Off Front (in) |
| 1 | 1 | 3.50 | 2.50 |
| 1 | 2 | 47.95 | 2.50 |
| 1 | 3 | 95.90 | 2.50 |
| 1 | 4 | 140.50 | 2.50 |
| 1 | 5 | 3.50 | 62.00 |
| 1 | 6 | 47.95 | 62.00 |
| 1 | 7 | 95.90 | 62.00 |
| 1 | 8 | 140.50 | 62.00 |

| Bracket Mounting Position for an 8 Bracket Hood | | | |
|---|---|---|---|
| 5 | 6 | 7 | 8 |
| BACK | | | |
| 1 | 2 | 3 | 4 |
| FRONT | | | |



NOTE: All dimensions are in units of in.



Variable Volume

Greenheck Kitchen Controls

Standard Construction Features:

Includes control system, VFDs (unless otherwise stated), Temperature Sensors, Touchscreen. IMC 507.2.1.1 compliant.

Options & Accessories:

| | |
|-------------------------------|---|
| Mounting Option | Right Cabinet on KH-1 |
| Exhaust Fan Quantity | 1 |
| Hood Light Control | Yes |
| User Interface | Full Color Touchscreen |
| Touchscreen Mounting Location | Utility Cabinet - Right End of Hood - Right Cabinet on KH-1 |
| Exhaust During Fire | Exhaust fans will run at max speed when in fire mode |
| Building Management System | BMS Interface: BACnet IP |

Controlled Fans:

| Fan Mark | Fan Type | Supplied By | Phase | HP | Voltage | NEC FLA | Starter/VFD Required | Starter/VFD Provided |
|----------|----------|--------------|-------|----|---------|---------|----------------------|----------------------|
| KEF-1 | Exhaust | Manufacturer | 3 | 2 | 460 | 3.4 | Yes | Yes |

Controlled Hood Sections and Fan Relationships:

| | |
|--------------------------------------|--------------------------|
| KH-1 Section - Number of Sensors = 1 | |
| | Exhaust Fan Name - KEF-1 |
| KH-2 Section - Number of Sensors = 1 | |
| | Exhaust Fan Name - KEF-1 |

