PROVEN & TRUSTED SINCE 1952

GFSE Recirculating/Ventless Hood Installation Requirements

Includes specific information for New York City installations requiring a Certificate of Approval (COA)

Ventless recirculating equipment has requirements which must be met prior to & during installation of the equipment and certain appropriate local approvals. For New York City an additional Fire Suppression permit ***(not included in the Ventless Hood purchase price)*** will also be needed for all NYC Ventless Hood installations. If so requested, *Giles* can assist customer with contacting an approved Ansul dealer/installer. **Presently, only the equipment models listed in the NYC specific section with COA numbers can be considered for installation in NYC.**

Please review the attached information to verify that the equipment being considered is suitable for the intended application.

- A ***conventional ventilation hood system*** should always be considered the ***first-choice*** ventilation solution.
- Recirculating ventilation systems ***will not*** completely remove cooking aromas & effluents, as per UL listing & EPA 202 standard.
- A recirculating system is a ***light-duty*** solution for ***low volume food preparation operations only*** when a conventional system is impossible due to physical, architectural or regulatory constraints, or impractical due to circumstance. A COA is required for NYC.
- **Integral** Type-1 fryer recirculating hoods require 300 sq. ft. (or more) of kitchen floor space per each installed hood.
- **Non-Integral** Type-1 recirculating hoods (FSH-2, FSH-2A-99 & GVH-C/F) require 300 sq. ft. (or more) of kitchen floor space per each installed hood with a **10-ft recommended** ceiling clearance, see page 4 for the **minimum ceiling height** over the entire kitchen area. Models FSH-4 and FSH-6 require 600 sq. ft. (or more) of kitchen floor space per each. Maximum of 1 per 600 sq. ft.
- ***Sufficient fresh outdoor air make-up equal to 10 (MIN.) to 15 complete room air exchanges per hour (ACH) … MOST CASES WILL REQUIRE 15 ACH. If local code requirement is LESS than the minimum, then the range 10 min. to 15 ACH overrides code.***
- **Not all Authorities Having Jurisdiction (AHJ)** (building, fire, health, etc.) allow use of Recirculating Hoods in their respective jurisdictions. It is the customers sole responsibility to ensure the AHJ's allow the use of Recirculating Hoods.
- **Additionally,** local requirements may be more stringent than the manufacturer's UL listing requirements. The most stringent requirements shall always take precedent! Requirements of this document shall always override lesser requirements.
- Any dispute arising from the sale, installation, operation, or performance of a ventless appliance/hood shall be governed by the laws of the state of Alabama and shall be resolved in the courts of the county of Montgomery in the state of Alabama.
- Giles does not make representations as to proper design or layout of any establishment in which ventless appliances or hoods will be used. Further, Giles does not perform on-site inspections prior to order acceptance or installation for any of its equipment.
- **GILES ENTERPRISES, INC., MAKES NO FURTHER WARRANTIES, EXPRESS OR IMPLIED INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND HAS NO OTHER OBLIGATION OR LIABILITY NOT SPECIFICALLY STATED HEREIN.**

ADDITIONAL INFORMATION

- Ventless Hoods shall not be installed in open spaces. (such as shopping malls)
- You must consult with a licensed HVAC contractor/specialist & confirm that the existing HVAC system can handle the heat load of any additional cooking appliance. Generally, 15 to 20% of the total appliance kW can be used to calculate the heat load.
- You must be aware of the requirements for installation & use of the Giles Recirculating Hoods shown on ***pages 3 - 5*** and agree to follow these instructions. I further understand, failure to comply with these instructions will void Manufacturer's Warranty.
- You must be aware that spaces in which Giles Ventless Systems are located shall be considered to be commercial kitchens with the minimums noted above. (Note: see limitations above)
- You must supply an Appliance Specification Sheet(s) for each appliance to be placed under the Giles Recirculating Hood(s), and further agree not to deviate at any time from the declared appliances while using the Giles hood(s).
- You must consult with a licensed HVAC contractor/specialist & confirm that the area where Giles Recirculating Hood(s) is to occupy & operate will meet all local codes & manufacturer's requirements for air quality, including capability of the existing on-site HVAC system.
- HVAC system outdoor air supply is required & must equal **ten (10) min. to fifteen (15)** complete room air exchanges per hour (ACH). **In most cases, the upper value of the range (15 ACH) will be required.**
- Building pressure should be higher than outside ambient, with kitchen pressure lower than customer seating, if separate. Amount of outdoor air supply required by Local Code shall not be less than the 10 min. to 15 ACH above.
- **Giles Recirculating Hoods require conscientious daily, weekly & monthly maintenance including the timely replacement of OEM disposable filters. Operation Manual describes all Manufacturer's requirements for proper Hood maintenance.**
- You must be aware of Specific Appliance Criteria as noted on each Giles Recirculating Hood Spec Sheet and the Requirements for the ceiling height & square footage area of the "Kitchen" (See all pages of this document!).
- **My kitchen (Width) Ft. X (Length) Ft. = Kitchen SQ FT (Kitchen Ceiling Height) = Ft.**
- You must be aware of necessary compliance with Specific Requirements for the Fire Suppression system according to the Operation Manual … Interlocked Appliances, Nozzles, Fusible Link rating, Suppressant Chemical ... See Operation Manual.
- You must be aware that semi-annual inspection of the Fire Suppression system & cleaning of the Hood by an authorized agent is required.(This should be scheduled during the fire inspection to limit additional down time)
- Use and completion of the Daily Ventless Hood Maintenance Checklist. (supplied with the Hood)
- Notify Giles of any adverse code violations or inspections related to the operation of the Ventless Hood.
- Ventless Hoods **shall not** be located in the basement or cellar of any building.
- Ventless Hoods **shall not** be installed in any structure that is **NOT** protected by a building sprinkler system. Ventless Hoods **shall not** be installed where residential space is located above the installation site or application.
- Installation requirements may not be altered by any inconsistent or contrary terms in a purchase order, contractor agreement, or otherwise.
- In no circumstance shall Giles be liable to the customer or any third party, or otherwise responsible party for any special or consequential damages including, but not limited to, lost revenue, lost profits, Attorney Fees, indirect cost arising from the purchase, sale, installation or use of equipment. The customer's sole remedy for any breach by Giles shall not exceed the purchase price or replacement of equipment purchased.

ALL NEW YORK CITY DOB plans approval are subject to the following additional restrictions:

- DOB plans shall be docked (stamped & numbered) by the New York City Department of Buildings.
- Ventless Hood shall not be installed in any non-fireproof building or non-sprinkled building.
- Semi-annual inspection of the Fire Suppression system by an authorized agent. (FDNY requirement)
- All Hood Fire Suppression Links are required as stated in the Giles Recirculating Hood installation manuals.
- Use and completion of the NYC Daily Ventless Hood Maintenance Checklist. (supplied with the Hood)
- Ensure the COA (Certificate of Approval) sticker is placed in a conspicuous location on the Ventless Hood that will always be visible for code officials (AHJ).

Contact the local AHJ's (fire marshal, health department & building inspector) to confirm approval of a Recirculating Hood System for your intended application.

ELECTRICALLY HEATED EQUIPMENT ONLY

Refer to equipment spec sheets located at www.gfse.com for "Appliance Constraints Criteria"

NON-INTEGRAL TYPE 1 HOODS

Limited to low volume of protein cooking only

FSH-2 **(Standard open fryers up to 20K / No Auto-Basket Lift fryers)**

Distance from ceiling (exhaust outlet):	Minimum (0")
Minimum ceiling height:	90" (229cm)
Distance from combustibles (Back, Top & Sides):	(0")
Max Operating Fryer Temp:	350°
Fire suppression system:	Ansul R-102 Wet Chemical system***

FSH-2A-99 **(Auto Basket lift or Pressure Fryers up to 20K)**

Distance from ceiling (exhaust outlet):	Miimum (0")
Minimum ceiling height:	99" (290cm)
Distance from combustibles (Back, Top & Sides):	(0")
Max Operating Fryer Temp:	350°
Fire suppression system:	Ansul R-102 Wet Chemical system***

FSH- …4'…6' **(Fryers up to 20K, Griddles/Grills, Ranges up to 25K, Ovens up to 55K) - *NO CHARBROILERS***

Distance from ceiling (top of hood):	Minimum 10" (25cm) or measured from the top of the exhaust 14" (36cm)
Minimum ceiling height:	120" (290cm) W/72" stand Recommended (115-5/8" FSH-4, 117-3/16" FSH-6 MIN)
Distance from combustibles (sides):	18" (61cm) - (0") when using the stands
Mounting height above appliance:	33" (84cm) Recommended / 42" (106.68 cm) Maximum
Max Operating Temp:	Fryers 350°, Griddles 400°, Ranges 400° all other ovens 500°
Fire suppression:	**Not included** (*pre-piped for Ansul R-102 Wet Chemical system or for use with Piranha System*) **

GVH- (C & F) **(Fryers, Griddles/Grills, Ranges, Ovens, Toasters)** ***NO CHARBROILERS***

Distance from ceiling (exhaust outlet):	Minimum, (0")
Minimum ceiling height:	As low as 84" (213cm) with Counter top model setting on a 25" (64cm) table 82-3/16" (209cm) for Floor Stand model
Distance from combustibles	(0") (Back, Top & Sides):
Mounting height above appliance:	19" (48cm) maximum from lower skirt edge to appliance heated area
Max Operating Fryer Temp:	350°
Fire suppression system:	**Not included** (*pre-piped for Ansul R-102 Wet Chemical system*) **

NEW YORK CITY SPECIFIC GILES UNITS WITH COA NUMBERS

INTEGRAL TYPE 1 HOOD

Limited to low volume of protein cooking only

COA # 5715 GEF & GBF-VH (Series) and COA # 5664 WOG-MP-VH

Distance from ceiling to exhaust outlet.	Recommended, (0"), *(18" required for Pre-diverter style units)*
Minimum ceiling height:	91" (231cm) / (109" *required for Pre-diverter style units*)
Distance from combustibles (Back, Top & Sides):	(0")
Max Operating Fryer Temp:	350°
Fire suppression system:	**Not included** (*pre-piped for Ansul R-102 Wet Chemical system only)* **

NON-INTEGRAL TYPE 1 HOODS

Limited to low volume of protein cooking only

COA # 5711 FSH-2 & 2A-99 **(Auto Basket lift or Pressure Fryers up to 20K)**

Distance from ceiling exhaust outlet.	Recommended (0")
Minimum ceiling height:	99" (290cm)
Distance from combustibles (Back, Top & Sides):	(0")
Max Operating Fryer Temp:	350°
Fire suppression system:	**Not included** (*pre-piped for Ansul R-102 Wet Chemical system only)* **

COA # 5706 GVH- (C & F) **(Fryers, Griddles/Grills, Ranges, Ovens, Toasters)** ***NO CHARBROILERS***

Distance from ceiling exhaust outlet.	Recommended, (0")
Minimum ceiling height:	As low as 84" (213cm) with Countertop model setting on a 25" (64cm) table 82-3/16" (209cm) for Floor Stand model
Distance from combustibles (Back, Top & Sides):	(0")
Mounting height above appliance:	19" (48cm) maximum from lower skirt edge to appliance heated area
Max Operating Fryer Temp:	350°
Fire suppression system:	**Not included** (*pre-piped for Ansul R-102 Wet Chemical system only*) **

FSH- …4' & 6' **(Fryers up to 20K, Griddles/Grills, Ranges up to 25K, Ovens up to 55K) - NO CHARBROILERS**

Distance from ceiling (top of hood):	Minimum 10" (25cm) or measured from the top of the exhaust 14" (36cm120" (290cm)
Minimum ceiling height:	W/72" stand Recommended (115-5/8" FSH-4, 117-3/16" FSH-6 MIN)
Distance from combustibles (sides):	18" (61cm) - (0") when using the stands
Mounting height above appliance: Max	33" (84cm) Recommended / 42" (106.68 cm) Maximum
Operating Temp:	Fryers 350°, Griddles 400°, Ranges 400° all other ovens 500°
Fire suppression:	**Not included** (pre-piped for Ansul R-102 Wet Chemical system or for use with Piranha System) **

** Only the internal plumbing is included. The customer is responsible for contacting a Local Ansul Installer for **NYC** permitting and required final system installation. Not included in the Hood price.

** FOR ELECTRICALLY HEATED EQUIPMENT ONLY **

Limited to low volume of protein cooking only

NOTE: Refer to equipment spec sheets and NYC/COA Reports located at www.gfse.com for additional NYC information!

Appliance constraint criteria MUST be followed and MUST not exceed the listed maximums for any Giles Recirculating Hood!

Failure to install any Giles Recirculating Hood in accordance with Manufacturer's instructions, the Hood listing or local AHJ requirements, whichever is more stringent, will void the Manufacturer's Warranty. (See all pages this document)

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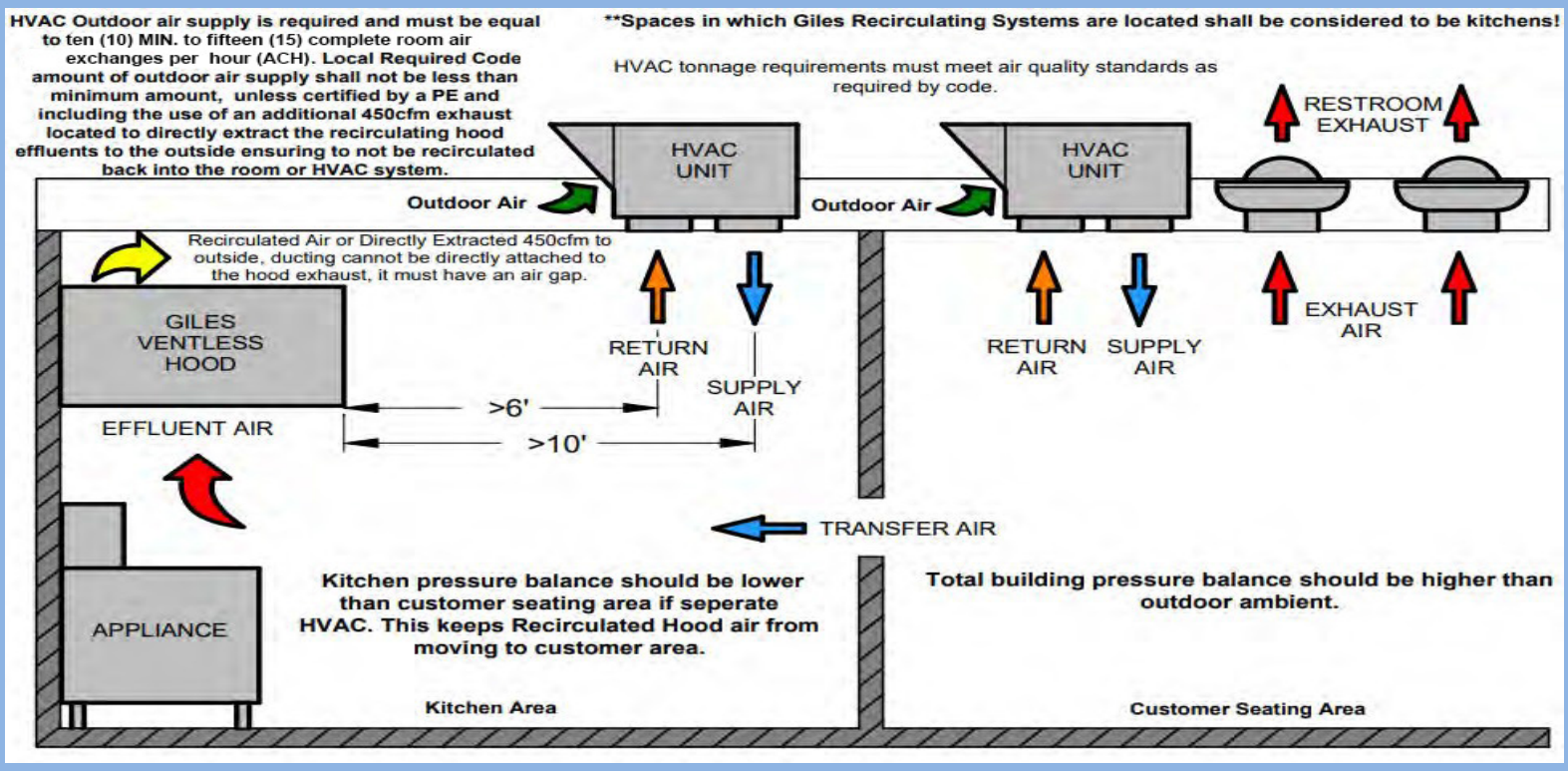
!! CAUTION !!

"Required" installation information for proper minimum installation of any Giles Recirculating Hood.

For additional information, the complete Installation Requirements for this unit is inserted in the operations manual and also available on the Giles website. *

NOTE: Failure to install any Giles Recirculating hood according to the manufacturer's instructions and the listing of the recirculating hood will void the manufacturer's warranty. Please contact Giles Customer Service at the # below with any questions.



Drawing not to scale Sample room set-up, minimum back wall length for the hood is 10 feet.**
The minimum ceiling height for each specific Giles Recirculating Hood must be maintained for the entire kitchen area.
Large Hoods must have minimum 118" ceiling to floor. See Spec sheet or Unit Operations Manual.

Additional Requirements (*All Hoods Limited to low volume of protein cooking only*)

NOTE: Spaces in which such systems are located shall be considered to be ***kitchens***. Additional local requirements may be more stringent than the manufacturer's UL listing requirements. Most stringent requirements always take precedent!

For the purpose of determining the floor area required to be ventilated;
Integral Type 1 recirculating hoods require >300 sq. ft. of kitchen. Maximum 1 hood per 300 sq. ft. of kitchen.
Non- Integral Type 1 recirculating hoods (FSH-2, FSH-2A-99, GVH-C/F) require >300 sq. ft. of kitchen. Maximum 1 hood per 300 sq. ft. of kitchen

Outdoor air ventilation through HVAC is required for areas in which Giles Recirculating Hoods are used. For Giles Recirculating hoods we require Outdoor air ventilation equal to **10 (MINIMUM) TO 15** complete air room exchanges per hour (ACH) ... most cases will require the upper end value of the range (15 ACH).
"Local Required Code amount of outdoor air supply shall not be less than the minimum amount."

Recirculating Hood exhaust **shall not** be directed into a closed in or area above a false ceiling.

*Outdoor Air is required from the HVAC system.
** Supply Air brings conditioned air into the room. (At least 10 feet from the hood)

** Return Air takes air out of the room and normally has a filter just behind the panel, (at least 6 feet from the hood)
Do not place Return Air / Register within 6 feet of the hood
Proper Fire Suppression links by model must be used, with all appliances interlocked to the hood.

Improperly installed Recirculating Hoods could receive an air-quality infraction from the AHJ

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Site Visit RSM/REP Overview: Giles Ventless Technology Compatibility

Site Visit Checklist:

Site Location Name/Number: _____

Physical Dimensions and Installation Requirements

- **Kitchen Total Sq Ft:** _____
- **Kitchen Ceiling Height:** _____
- **Minimum Ceiling Height (120" required):** [ ] Pass [ ] Fail
- **Distance from Top of Hood to Ceiling (10" required):** _____
- **Mounting Height Above Appliance (36" required):** _____
- **Distance from Combustibles (Sides) (0" required):** _____
- **Entry/Exit Clearance:** Does the path accommodate the 36" FSH-6 design? [ ] Yes [ ] No
- **Door Types:** Note all entry/exit door types: _____

HVAC and Air Circulation

- **Total Air Exchanges per Hour (10 minimum required):** _____
- **Fan CFM:** Get the CFM of the fans in the room: _____
- **Air Vent Placement:** Note all return and intake vents.
- **Vent Distance:** Measure distance from vents to proposed FSH-6 location: _____

Equipment Specifications (Quick Spec Guide)

- **Current Fryer Operation:** Are they using the BKI under pressure? [ ] Yes [ ] No
- **Max Input Power (40kW for Fryers, 25kW for Griddles/Ranges max):** Actual kW:_____
- **Max Griddle & Range Cooking Temp (400°F / 204°C max):** Actual Temp: _____
- **Max Fryer Cooking Temp (350°F / 177°C max): Actual Temp: _____**
- **Shortening Capacity (160lbs total max):** Actual Capacity: _____
- **Cooking Area (760 in² total max):** Actual Area: _____
- **NOTE: SEE PMG LISTING REPORT FOR FULL APPLIANCE SPECIFICATIONS**

Site Observations and Media

- **Traffic Patterns:** Note staff/customer traffic in front of fryers: _____
- **Fire Suppression:** Note existing Ansul R-102 Wet System for factory pre-pipe connection.
- **Photos/Video:**
  [ ] Detailed pictures of Entire Kitchen Area
  [ ] **Detailed video of current setup [ ] Photos of all entries and exits**