

Report By:

National TAB
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NATIONAL

TAB

Comfort. Under control.

Report: Commissioning

Date: 4/1/2022

PROJECT

Shake Shack (Chesterfield) - Commissioning

17312 Chesterfield Airport Road

Chesterfield, MO 63005

Client

24 Union Square East, 5th Fl

New York, NY 10003



National TAB

Project: Shake Shack (Chesterfield) - Commissioning

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Shake Shack (Chesterfield) - Commissioning

CheckList Information

Name :	(FIV) RTU KITCHEN - Above Ceiling	Status :	NotSubmitted
Assigned Organization :	MULTIPLE	Asset :	
Requesting Organization :	National TAB		

CheckList Item Details

KITCHEN RTU

Duct is routed and sized per plan	Yes
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Duct is properly supported	Yes
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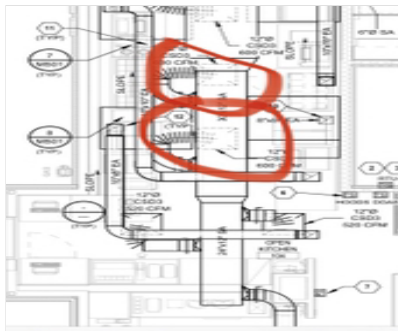


Ductsupport.jpeg

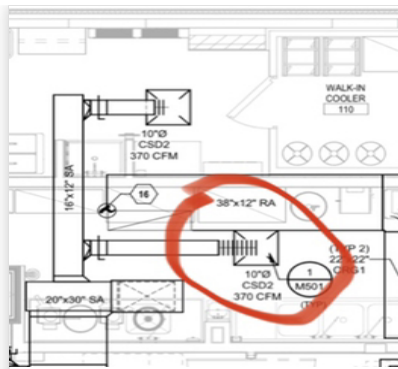
Branch dampers are installed and accessible

Diffuser takeoff moved to top and routed around obstructions. Best possible path due to obstructions. If TAB is not able to access damper during balance, MC will have to secure the take off damper to 100% open and mount a new damper at the diffuser neck. During inspection C-Agent was able to get to damper on 8ft ladder (prior to ceiling grid)





**Topsideandwrappedoppside.j
peg**



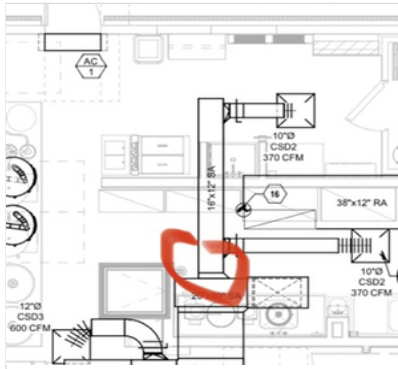
Diffusernoted.jpeg



Takeofftopside.jpeg

High efficient take-offs are installed for each branch line

Most take-offs are high efficient, a few areas noted have straight round take-offs. If flow is not achieved during balance, MC should scoop or change the take-off. Due to the location C-agent does not believe this take-off will present an issue.



Branchsrandartakeoff.jpeg



Branchstandardtakeoff.jpeg

Flexible duct is maximum 5ft and ine 90 degree bend

Yes

Supply and return duct is properly insulated with all external insulation foil taped.

Duct is insulated. Some insulation has sagging on the large ducts and we suggest pinning or strapping the insulation





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CheckList Information

Name :	(FIV) RTU DINING - Above Ceiling	Status :	NotSubmitted
Assigned Organization :	MULTIPLE	Asset :	
Requesting Organization :	National TAB		

CheckList Item Details

DINING HVAC DUCT

Duct routed per plan

Through wall offset was installed due to arch/mech drawing location difference. Offset created to avoid conflicts with lighting

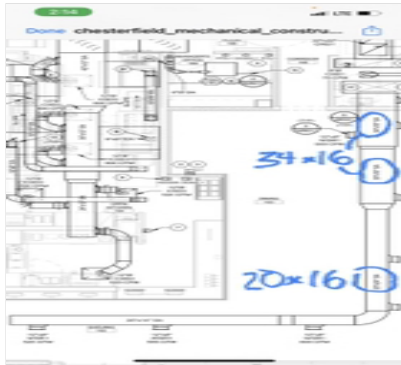


Offsetnotondrawing.jpeg

Duct size is per plan

Through wall main duct is designed 34x18 actual size is 34x16 Section 24x20 is actually 24x16





RTUDUCTDINING.jpeg

Duct is properly supported Yes

Duct is internally insulated in open ceiling spaces per specification Yes



Internalinsulated.jpeg

Diffusers/Take-offs are correct size and location Yes

Unexposed Duct is externally insulated and foil taped Yes





Externalwrapabdtaped.jpeg

Dampers are installed and accessible

OBD'S not installed at time of inspection Restroom dampers are above hard-lid ceiling. Need to ensure access to damper once ceiling is installed Men's RR duct flex duct exceeds 5ft



Damperaboveceiling.jpeg



Longflexsupported.jpeg

Return duct install, sized and insulated per plan

Yes





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Shake Shack (Chesterfield) - Commissioning

CheckList Information

Name :	(FIV) MECHANICAL Hood and grease duct - above Ceiling	Status :	NotSubmitted
Assigned Organization :	MULTIPLE	Asset :	
Requesting Organization :	National TAB		

CheckList Item Details

KITCHEN HOODS

Hoods are hung in the correct locations	Yes
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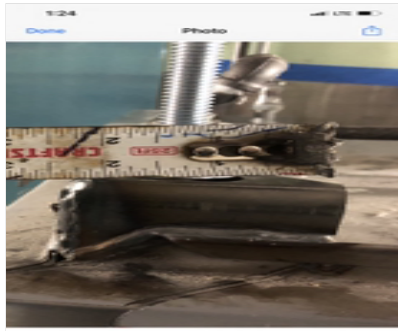
Hood is hung at the correct elevation (height)	Design height is 71", hoods are hung at 78". CAS approved at 78" for airflow set to +5% over design and cooking equipment >31" tall
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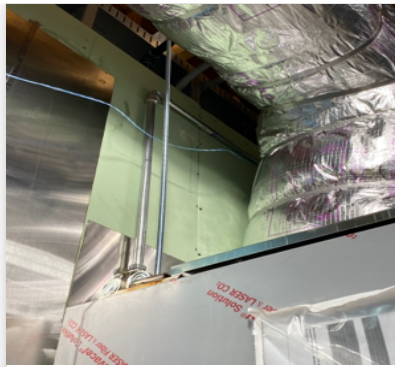
Hangheight.jpeg

Hood is hung using 1/2" all-thread and supported from beam clamps or uni-strut off from the building structure	3/8" originally installed. MC replaced with 1/2" rod
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Halfinchthreadrod.jpeg



375threadsize.jpeg

Double Nut used on both ends of all thread

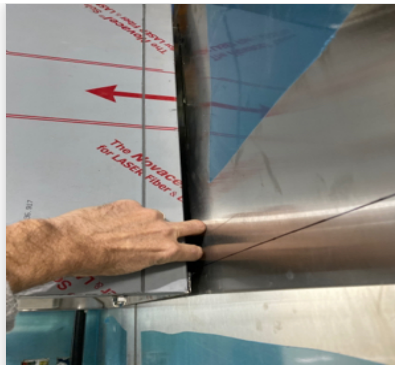
Yes

Hood is installed so the the bottom and sides of hoods are flush to the wall, with gaps less than 1/8".

No



Fryhood.jpeg



Griddlehood.jpeg

GREASE DUCT

Grease duct routed and sized per plan

Yes. Extra back to back elbows on external wall fryer and griddle hoods.





ExtrabtbElb1.jpeg



ExtrabtbElb2.jpeg

Grease duct pressure water test completed	Yes
Fire wrap layer 1 installed and inspected	Yes
Fire wrap 2nd layer installed and inspected	Installing during inspection
Proper cleanouts have been installed per code	Yes



FuseIT6c1b99428b4646.jpeg



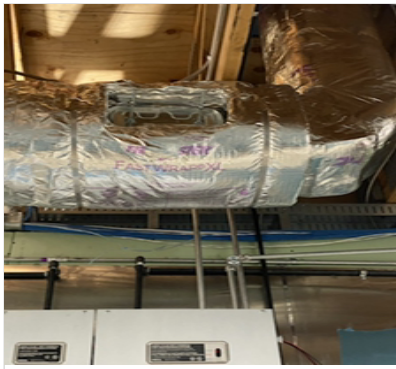
FuseIT361889c5818942.jpeg



FuseITc2dd5b43d52540.jpeg

Cleanouts fire wrapped and marked for easy verification and access	Installed but cleanouts not insulated and marked at time of inspection,
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Cleanouts.jpeg

Duct is flashed to top of curb, flat so that the perimeter gasket can seal the top plate air tight

Curb is flashed but it is not flush, mechanical needs to unscrew the top plate and flatten the curb plate to obtain a good fan seal before securing to the curb



FuseITa3a6b60044924b.jpeg



FuseITcc206a36981c4e.jpeg

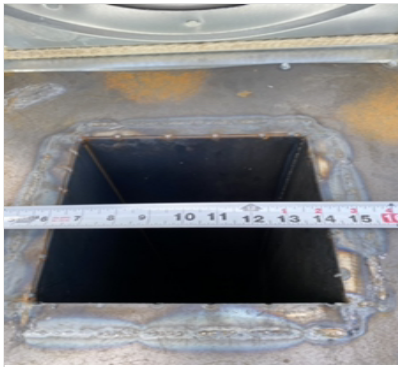


FuseIT40d7b91d085c4e.jpeg

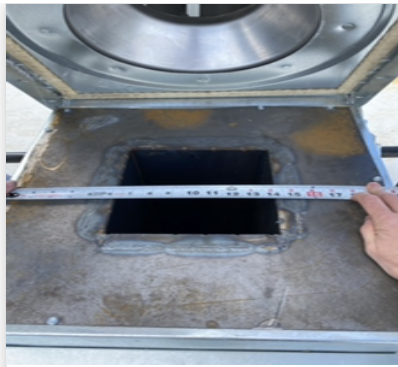
Grease duct is located in the center of the curb top plate so that the fan's inlet venturi is centered within the grease duct

Grease duct is located in the center of the top plate, duct does not transition out to surround the fan inlet.

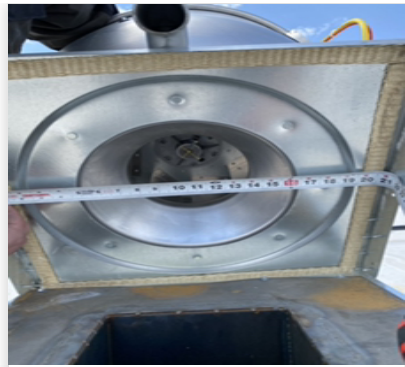




**FuseIT87dd1512d8e24ca3b81
8af86903b9e4f.jpeg**



**FuseIT4f6b1dc8e1984dfeba0
7896d3da3a47a.jpeg**



**FuseIT6a6dff5681546cca2b2
de332f6aa9c9.jpeg**





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CheckList Information

Name : (FIV) KEF- Above Ceiling **Status :** NotSubmitted
Assigned Organization : MULTIPLE **Asset :**
Requesting Organization : National TAB

CheckList Item Details

KITCHEN HOOD EXHAUST FANS

Unit Tag matches the design and submittal MFG and Model	Yes
There is no noticeable physical damage to the fan	No damage
Fans are installed in the correct location and orientation	Yes
All packing, material and debris has been removed from the blower/wheel housing and the motor compartment	Yes
Fan wheels turn easily by hand (turn power off prior to testing)	Yes
Exhaust fans have external disconnects and are are connected to allow full hinging of each exhaust fan	Yes
Fan is properly hinged and supported when hinged fully back for grease duct access	Fan is hinged but the lever arm is out side of the brace on some hinges. The bolts are tightened too tight, no allowing the fan to catch when opened on these braces. MC to bend lever arm so that it will catch on the brace and loosen the bolts to relieve some tension so that this functions as designed





Boltstension.jpeg



Leverandbrace.jpeg

Grease cups are properly installed and connected to the fan base grease drain to prevent spilling outside of the grease cup

Yes



grease_cup.PNG

Exhaust fans are located 5ft from parapet wall and 10ft from any fresh air intake.

Yes



KEF.jpeg



Top of fan discharges a minimum 40" above the finished roof

Yes



fandischarge42.jpg





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CheckList Information

Name :	(FIV) MECHANICAL RR Exhaust - Above Ceiling	Status :	NotSubmitted
Assigned Organization :	MULTIPLE	Asset :	
Requesting Organization :	National TAB		

CheckList Item Details

RESTROOM FAN ROOF TOP INSTALLATION DETAIL

Fan make and model matches submittals	Yes
Fans are installed in the correct location and orientation	Yes
There is no noticeable physical damage to the fan	Fan is installed with no physical damage
Gravity Back Draft Damper is properly installed and opens fully by hand	Yes
	
<p>Gravitydamper.jpeg</p>	
Gravity Back Draft damper is fully sealed to prevent any air leakage between it and the curb	Yes
Fan is located at least 10ft from fresh outdoor intakes	Yes
Fan is secured to the curb base	Yes
Curb extends a minimum 12" above the finished roof	Yes



RESTROOM FAN ABOVE CEILING DETAIL

Duct is routed and sized per plan

Yes dampers will be above hard ceiling. Ensure access to dampers for TAB



Takeoffabovehardlid.jpeg

Branch lines flexible duct less than 5 ft and one 90 degree bend

No, takeoff is located above ductwork. Runs 180deg flex (exceeds 90 degrees) and is greater than 5ft in length. This needs to be rerouted to ensure it meets the specification of less than 5ft of flexible duct with a limit of 1-90 degree bend.



Locationofflex.jpeg



Slacking180degflex.jpeg

Main duct properly supported

Yes

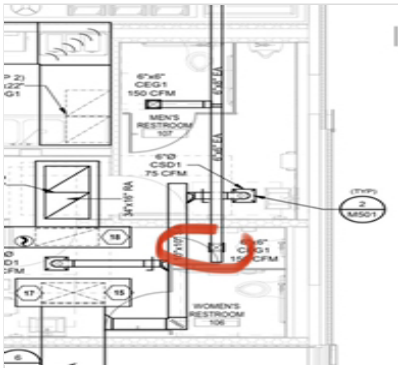




Supportedduct.jpeg

Flexible duct is supported and routed to prevent kinks

No



Locationofnote.jpeg



Flexkink.jpeg





OfficeFCU.jpeg

4" OA duct installed with motorized damper

Yes, ducted into office with M-damper. Fully insulated



4ductanddamper.jpeg



4insulatedduct.jpeg

FCU is properly supported

Yes



FCUSupports.jpeg

Condensate line is installed to appropriate drain line

No

