

**Report By:**

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**NATIONAL**

**TAB**

Comfort. Under control.

**Report: Commissioning**

**Date: 4/2/2022**

# 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

<b>Name :</b>	(FIV) - Plumbing Action Items - Above Ceiling	<b>Status :</b>	NotSubmitted
<b>Assigned Organization :</b>	MULTIPLE	<b>Asset :</b>	
<b>Requesting Organization :</b>	National TAB		

### CheckList Item Details

#### **GAS LINE**

Low pressure natural gas lines, subject pipe to 10psig air pressure for period of one hour, with a resultant air differential pressure of 0psig. Test per gas company requirements where required

Complete connections to water heater & Food Equipment

#### **DOMESTIC WATER**





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## Shake Shack (Chesterfield) - Commissioning

### CheckList Information

**Name :** (FIV) - Gas Pipe **Status :** NotSubmitted

**Assigned Organization :** National TAB **Asset :**

**Requesting Organization :** National TAB

### CheckList Item Details

#### **GAS LINE GENERAL CONDITIONS**

Gas lines are routed per plan

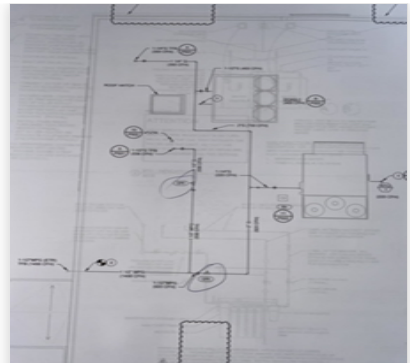
Slight deviation at roof access hatch, deviation appears to be an acceptable deviation to the planned route



**Gastorooft.jpeg**



**Gaslayout.jpeg**



**Gaslineroofplan.jpeg**

Gas lines sizes are per plan

Yes

Low pressure natural gas lines, subject pipe to 10psig air pressure for period of one hour, with a resultant air differential pressure of 0psig. Test per gas company requirements where required

#### **GAS LINE - ROOFTOP**

Gas line through roof penetration is per detail

Yes

Gas lines are supported on roof, indicated method and intervals

Line is currently supported, final inspection will ensure proper intervals.



Gas lines on the roof have been painted or has required rust inhibitor applied. Refer to specification for exact requirement

Gas line has been installed at each RTU's per detail

Yes



RTUgconnection.jpeg



DOASgconnection.jpeg

**GAS LINE - COOKING EQUIPMENT**

Gas lines are located and sized per plan

Gas line maintenance shut-off valves and flexible hose kit are connected to food equipment

Fire Suppression Mechanical or Electrical GAS shut-off valve is installed in code compliant area, correct orientation, and is placed to shut-off gas to all equipment under each hood.

Yes

**GAS LINE - WATER HEATERS**

Gas line connection to each hot water heater is routed and sized per plan

Gas line connection to the water heater is per plan/details





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## Shake Shack (Chesterfield) - Commissioning

### CheckList Information

<b>Name :</b>	(FIV) - Domestic Water Plumbing Above Ceiling	<b>Status :</b>	NotSubmitted
<b>Assigned Organization :</b>	MULTIPLE	<b>Asset :</b>	
<b>Requesting Organization :</b>	National TAB		

### CheckList Item Details

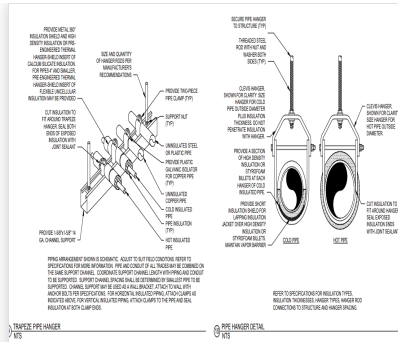
#### GENERAL DOMESTIC LINE INSTALLATION CRITERIA

All water lines are routed away from electrical panels, do not route over electrical panels	Yes
HW, HWR, & CW lines are routed and sized per plan	
From circulated hot water branch or main to termination of hot water fixture supply: For 1/2" HW supply pipe to individual sinks, provide a maximum length of 43ft	Yes
From circulated hot water branch or main to termination of hot water fixture supply: For 3/4" HW supply pipe to individual sinks, provide a maximum length of 21ft	Yes
CW, FW, HW, HWR lines are type "L" hard temper copper tube with wrought copper fittings and soldered connections. If PEX is used as an approved alternate, include documentation of PEX specification.	Yes
All lines are supported as per details with no sagging of lines between supports (maximum 5ft intervals) supports must be from structure and not roof.	Yes





Waterpipesupport.jpeg



pipe\_support\_details.PNG

All Copper lines are insulated per specification

Yes



Pipeinsulate.jpeg

**B. PIPING AND EQUIPMENT INSULATION**

Provide domestic cold water, heated water, hot water, hot water recirculation, indirect and condensate drain pipe (within building) (in interior storm drain piping above ceiling and exposed with 1 inch one-piece fiberglass covering with air-service jacket with self-sealing top to provide a continuous vapor barrier by Certainted, Owens-Corning or Armstrong. For hot piping, provide pipe hangers and rear clamps sized for the outside diameter of piping. But insulation to hanger or riser clamp or Armstrong. Seal exposed insulation with insulation sealer. Exception for Vertical Piping: Provide clamps sized for the outside diameter of the vertical pipe and extend clamp through insulation. Seal penetrations of insulation and vapor barrier with wet coat of vapor barrier lap cement. For cold piping at hangers, provide 8 inch long sections of high density, high temperature calcium silicate by Johns-Manville, Fiberglass by Kraut, or 8 inch long styrofoam tiles by Dow or flexible unicellular piping insulation meeting ASTM C 534-01A, Type I with integral high density pipe supports and encased in steel insulation shield by Cooper B-Line, Amcabat, or approved equal. Insulation shall be continuous along the pipe surface, except at valves, unions, and where piping is exposed at fixtures. Provide 1 inch fiberglass insulation on vent piping within six feet of vent through the of roof. Provide fiberglass insulation on domestic cold and hot water pipes installed in walls and chases. Provide fiberglass insulation on domestic cold and hot water pipes installed in walls and chases. Provide insulation protection shield at each hanger for insulated piping.

Cover fittings with Zeston, Kraut, or equal one-piece PVC preformed insulating covers. Fitting covers, jackets and adhesives shall not exceed flame spread rating of 25 and smoke development rating of 30 per ASTM E84. Fill voids between covers and piping with fiberglass insulation and tape joints at all elbows and tees. Install pipe insulation in compliance with manufacturer's recommendations. Where preformed insulating fittings are not approved by the local AHJ, miter insulation at fittings.

insulation\_spec.PNG

HW, HWR, CW lines have are labeled

No

All domestic water lines have been sanitized per specification

No

**VALVES**

Install plumbing fixtures shut-off and/or balance valves just above the ceiling line serving fixtures in pipe chases (walls) or provide access doors low in the chase wall for valves inside pipe chases.

Yes





Pipevalves.jpeg

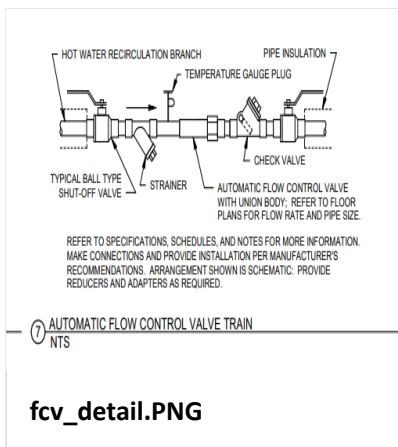
Thermostatic Mixing Valves with tamper resistant temperature adjustment, install valve in public lavatories and handwashing sink locations in accessible location. Set temperature as scheduled on the drawings

Pressure reducing valves are installed per plan and specification.

Backflow preventers are installed per plan and specification

0.5 GPM flow restrictors are installed on specified faucets/sinks.

Install flow control valves as shown on plans with scheduled flow capacities as scheduled on the HWR line



fcv\_detail.PNG

Water Hammers are installed prior to each check valve as shown on plans



Provide water hammer arrestors at valves or batteries of fixtures as indicated on the drawings to prevent water hammer. Arrestors shall be Jossan, Sioux Chief, Smith, Precision Plumbing Products, Protek, Water Works, or Zurn, stainless steel bellows type, or O-ring seated and lubricated acetal piston. Install water hammer arrestors per the Plumbing and Drainage Institute (PDI) W-211 installation instructions. Installation of arrestors at batteries of fixtures precludes the requirement for individual air chambers at each battery fixture. Submit certification that water hammer arrestors comply with NSF 61 Aesth. G and/or NSF 372.

**water\_hammer\_spec.PNG**

Install veggie wash PRV 45" AFF

Dedicated Cold Water line installed and regulated down to 25 psi for ECOLAB equipment

**CLEAN-OUTS, ACCESS DOORS, AND HYDRANTS**

Wall and Floor cleanouts have been identified and installed per plan

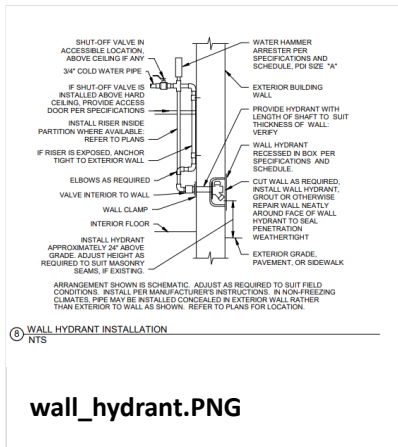
Floor cleanouts are installed.

Wall Cleanouts: As scheduled on the drawings, install wall cleanouts at points as noted on the drawings, at the foot of each soil, waste or interior downspout stack, at horizontal soil and waste branches longer than five feet not served by a floor cleanout, consult local codes for installation at specific fixture types. Install wall cleanouts above the flood rim of the fixture served within two feet of the floor and install extensions from the cleanout tee to the wall to locate the plug within 2 inch of the wall where required. Install cleanouts on urinals and sinks where required by code.

**wall\_cleanouts.PNG**

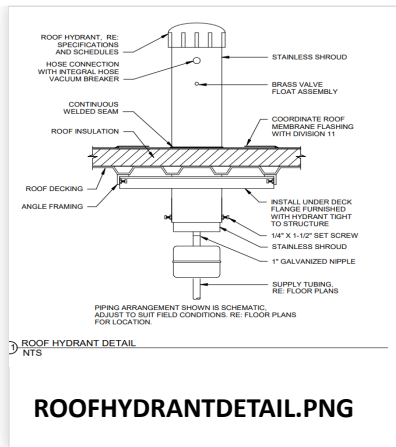
Wall hydrant is installed per details





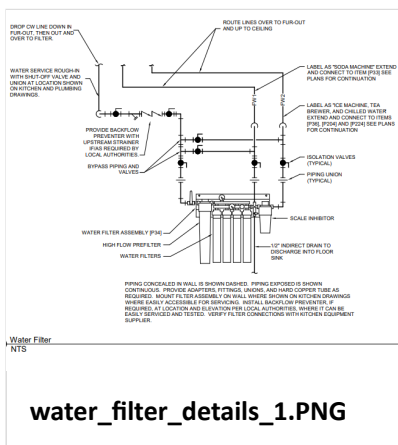
Roof hydrant is installed per details

Yes



**FILTER WATER SYSTEM**

Filter water line is routed and sized per plan



Filtered water lines are labeled

Incomplete at time of inspection



3-way bypass valve installed for maintenance of water filtering system

Incomplete at time of inspection

Filtering system is installed in proper location

Final water filters are installed

Incomplete at time of inspection

