



INSPECTION GUIDELINES

GENERAL PROCEDURES

All Inspectors shall read and become familiar with these procedures

Inspections carried over from the previous working day shall be given priority and must be performed first.

Inspection cancellations must be documented on the comment line with the name and telephone number of the person that requested it and the time of the request.

When a jobsite is not accessible always leave a tag and record in the comments line "Left tag at....."

Before using disposition code 035 "Unable to locate" use the Property Appraiser's web site http://www.miamidade.gov/pa/property_search.asp and/or call your supervisor. If permit holder cannot be reached place the hold code 067.

Do not use Field Check Disposition 010 without obtaining approval from supervisor.

The work shall be inspected for compliance with the permit plans and the applicable Code (FBC or SFBC).

The permit holder (contractor or owner builder) is responsible for the job and shall inspect the work and ascertain it meets code requirements before calling for inspection.

Temporary buildings and sheds used exclusively for construction purposes are exempt of a building permit (Zoning Improvement Permit required). Mobile homes used as temporary offices are required to comply with the requirements of F.S. Chapter 553, Part V relating to accessibility by individuals with disabilities.

Verify that you are recording the inspection result on the correct permit card.

All documents that you receive in the field from the permit holder shall contain the permit number on every page, the date and the inspector name and signature

Be thorough conducting the inspection and recording the results. List all deficiencies. When too many deficiencies are found, indicate on permit card "others". This will alert the inspector performing the re-inspection later on to perform a thorough inspection and not only a follow up of the items listed.

When performing a partial inspection clearly writes on the comment line the portion of work you are approving. Highlight the location of approved area on permit plans initial, date and cross reference drawing number on comment line. For large projects use a log. Write comments on permit card as well. Review completely previously denied partial inspections and approve or denied as required. If denied, include in your comments the corrections that are needed for approval.

Do not enter disposition 001 (approved) when previous inspection types are pending approval (previous inspection type was denied or partial approval was granted). Use disposition 043 (partial approval) and be explicit in your comments regarding the reason for the partial approval.

Close partial inspections in a timely manner.

In case of any doubt, check with your supervisor.

Always write on the permit card the date of the inspection; print your name and sign.

As a courtesy to Owners and Contractors alert them of code changes.



INSPECTION GUIDELINES

ROUGH 023-002

Mechanical 003 (A/C)

| | | |
|---|---|--------------------------|
| Verify permit card posted | FBC-B [A] 105.7 | <input type="checkbox"/> |
| Verify energy calculations and plans at worksite | FBC-B [A] 107.3.1, FBC-ENRG [C] 103.3.1 | <input type="checkbox"/> |
| Verify fees correspond to the scope of work | FBC-B [A] 109.1 | <input type="checkbox"/> |
| Verify Notice of Commencement: Mandatory (except when cost of construction is less than \$2500.00) from permit issuance. Write on the permit card and the comment line that you have confirmed this requirement for the benefit of the next inspector. Do not apply to the repairs or replacement of a/c systems less than \$7500.00. | FBC-B [A] 105.8 | <input type="checkbox"/> |
| Verify underground-excavated trenches/ditches/chases pipes, tubes, ducts and related component per its specifications prior to backfill/concealment | FBC-B [A] 110.3(1) | <input type="checkbox"/> |
| Verify pipes, tubes, ducts or related components per its specification prior to closure or concealment of the floors, walls or ceiling membranes | FBC-B [A] 110.3(2) | <input type="checkbox"/> |
| Verify approval's for supports for mechanical equipment by a registered design professional Letters/Drawings | FBC-M [BS] 302.4 | <input type="checkbox"/> |
| Verify pipe hangers supports, anchors are in accordance the plans details, approved materials for compatibility with the pipes (prevent galvanic action) | FBC-M 305.3 | <input type="checkbox"/> |
| Verify piping support intervals spacing requirement per (TABLE 305.4) | FBC-M 305.4 | <input type="checkbox"/> |
| Verify condensate drain line pitched (1-percent slope) | FBC-M 307.2.1, FBC-R 1411.3 | <input type="checkbox"/> |
| Verify condensate drain line minimum of ¾ -inch internal dia. | FBC-M 307.2.2, FBC-R 1411.3.1 | <input type="checkbox"/> |
| Verify horizontal primary condensate lines (unconditioned) spaces are insulated | FBC-M 307.2.5 | <input type="checkbox"/> |
| Verify equipment Vibration isolation or other approved means of restraint | FBC-M 301.13 | <input type="checkbox"/> |
| Verify mechanical systems are not be installed in elevator shaft | FBC-M 303.8 | <input type="checkbox"/> |



INSPECTION GUIDELINES

FINAL 001

Mechanical 003 (A/C)

| | | |
|---|--------------------------------------|--------------------------|
| Verify Permit card posted | FBC-B [A] 105.7 | <input type="checkbox"/> |
| Verify energy calculations and plans at worksite | FBC-B [A] 107.3.1, FBC-ENRG C103.3.1 | <input type="checkbox"/> |
| Notice of Commencement: Do not apply to the repair or replacement of a/c systems less than \$7500.00 (change-outs) | FBC-B [A] 105.8 | <input type="checkbox"/> |
| Verify the building is complete and ready for certificate of occupancy [CO] | FBC-B [A] 111.1 | <input type="checkbox"/> |
| Verify equipment sizing do not exceed 1.15 times the total calculated load and shall not be less than the latent load calculated. Mandatory | FBC-R ENRG 403.7.1.1 | <input type="checkbox"/> |
| Verify equipment sizing output capacity of heating and cooling equipment is not greater than the loads calculated in accordance with Section C403.2.1 | FBC-C ENRG 403.2.2 | <input type="checkbox"/> |
| Check for balanced return air/0.01 inch WC or less/exceptions 1, 2 and 3 - firewalls/ceilings must provide air duct pathways or air transfer pathways from the high pressure zone to the low zone | FBC-M 601.6 | <input type="checkbox"/> |
| Verify manufacturer's expanded performance data is be used to select cooling-only equipment | FBC-R ENRG 403.7.1.1 | <input type="checkbox"/> |
| Verify equipment vibration isolation – approved means of restraint | FBC-M 301.13 | <input type="checkbox"/> |
| Verify wind-load provisions; to include the exception - wind resistance requirements of the 2007 Florida Building Code | FBC-M 301.15 | <input type="checkbox"/> |
| Verify Locking access port Caps (tamper resistance caps) | FBC-M 1101.10 | <input type="checkbox"/> |
| Verify protection barriers for appliances subject to mechanical damage | FBC-M 303.4 | <input type="checkbox"/> |
| Check for all manufacturer's installation instruction at time of inspection | FBC-M 304.1 | <input type="checkbox"/> |
| Verify Level concrete pad Clearance /or other approved pad installed 3" inches above grade | FBC-M 304.10 | <input type="checkbox"/> |
| Verify guard protection appliances/fans/roof hatches within 10-ft of roof edge | FBC-M 304.11 | <input type="checkbox"/> |
| Verify rooftop units, stands, ductwork piping or similar equipment clearances | FBC-B 1522 | <input type="checkbox"/> |
| Verify units installed are marked/identified to area they served | FBC-M 304.12 | <input type="checkbox"/> |
| Verify air handler unit's attic installation/CODE COMPLIANCE | FBC-R ENRG 403.3.6 | <input type="checkbox"/> |
| Verify ladders access on elevated structures/higher than 16 feet | FBC-M 306.5 | <input type="checkbox"/> |
| Verify Sloped/roof serviceable level platform installation-33% or greater | FBC-M 306.5.1 | <input type="checkbox"/> |



INSPECTION GUIDELINES

| | | |
|---|----------------------------------|--------------------------|
| Verify receptacle outlet for equipment; on roof top installations | FBC-M 306.5.2 | <input type="checkbox"/> |
| Verify condensate lines discharge prohibited - streets/alleys/or nuisance | FBC-M 307.2.1 | <input type="checkbox"/> |
| Verify condensate drains trapped per appliance/manufacturer | FBC-M 307.2.4 | <input type="checkbox"/> |
| Verify water level monitoring device requirements | FBC- M 307.2.3.1 | <input type="checkbox"/> |
| Verify Appliance, equipment and insulation in drain pans | FBC-M 307.2.3.2 | <input type="checkbox"/> |
| Verify ductless mini-split equipment that produces condensate be provided with an inline check valve located in the drain line, or a trap | FBC-M 307.2.4.1 | <input type="checkbox"/> |
| Verify provision for condensation prevention on pipes (insulation) | FBC-M 1107.4, 1206.11 | <input type="checkbox"/> |
| Verify Energy performance level (EPL) display card (Mandatory) | FBC- ENRG R401.3 | <input type="checkbox"/> |
| Verify thermostat provision (Mandatory) one thermostat shall be provided for each separate heating and cooling system | FBC- ENRG R403.1.1 | <input type="checkbox"/> |
| Verify HVAC minimum equipment efficiencies (all tables) | FBC-ENRG R402.1.2.4, C403.2.3 | <input type="checkbox"/> |
| Verify blower door test for building or dwelling unit as having an air leakage rate not exceeding seven air changes per hour in Climate Zone 1 | FBC-ENRG R402.4.1.2 | <input type="checkbox"/> |
| Verify testing (Mandatory) ducts pressure tested to determine air leakage by one of the following methods, rough-in test or post construction test/Exception (1) & (2) | FBC-ENRG R403.3.3 | <input type="checkbox"/> |
| Verify mechanical systems and service water-heating systems commissioning and completion requirements/EXCEPTIONS (1) & (2) | FBC-ENRG C408.2 | <input type="checkbox"/> |
| Verify unit anchor bolt minimum pull-out @ 500/lbs. | Dade County Ordinance CHAPTER--8 | <input type="checkbox"/> |
| Verify air conditioning unit model/serial numbers-(Miami-Dade Police Department) has recognized that there is many "inside jobs" whereby installers are removing components following installation for re-sale at other job locations | Dade County Ordinance CHAPTER--8 | <input type="checkbox"/> |
| Verify remote controls machinery rooms | FBC-M [F] 1106.5.2 | <input type="checkbox"/> |
| Verify emergency machinery shut off - break-glass type or tamper resistance cover / OFF-only control | FBC-M [F] 1106.5.1 | <input type="checkbox"/> |
| Verify machinery rooms switch break-glass type on-only control of the ventilation fans | FBC-M 1106.5.2 | <input type="checkbox"/> |
| Verify smoke detectors installed where indicated in Sections 606.2.1 thru 606.2.3. /NFPA-90 ahead of any branch connections in air supply systems having the capacity greater than 2000 CFM's/ EXCEPTIONS | FBC-M 606.2.3 | <input type="checkbox"/> |

INSPECTION GUIDELINES

| | | |
|--|-----------------|--------------------------|
| Verify Carbon monoxide protection | FBC-B [F] 908.8 | <input type="checkbox"/> |
| Verify carbon dioxide (CO ₂) systems | FBC-B [F] 908.7 | <input type="checkbox"/> |



INSPECTION GUIDELINES

ROUGH/P-TEST 106

Mechanical 009

| | | |
|--|----------------------------------|--------------------------|
| Check and inspect underground-excavated trenches/ditches/chases pipes, tubes, ducts and related component per its specifications prior to backfill/concealment | FBC-B [A] 110.3(1) | <input type="checkbox"/> |
| Check pipe sizes and schedules | FBC-B [A] 110.3(1), FBC-M 1305.1 | <input type="checkbox"/> |
| Check piping allowances for expansion, contraction, jarring and vibration | FBC-M 1303.11 | <input type="checkbox"/> |
| Verify underground tanks are installed with flexible connectors | FBC-M 1303.11 | <input type="checkbox"/> |



INSPECTION GUIDELINES

FINAL 001

Mechanical 009

| | | |
|--|--------------|--------------------------|
| Verify Fill piping termination point 2' from any building openings | FBC-M 1305.6 | <input type="checkbox"/> |
| Verify vent terminate outside of building 2' feet building openings & weather proof | FBC-M 1305.7 | <input type="checkbox"/> |
| Verify shutoff valve installed on the fuel-oil supply line at the entrance to the building | FBC-M 1307.1 | <input type="checkbox"/> |
| Check if shutoff valves are connected to each fuel-burning oil appliance | FBC-M 1307.2 | <input type="checkbox"/> |
| Verify relief valve on pump discharge if it can exceed the oil system pressure | FBC-M 1307.3 | <input type="checkbox"/> |
| Verify testing - Fuel oil piping shall be tested in accordance with NFPA 31 | FBC-M 1308.1 | <input type="checkbox"/> |



INSPECTION GUIDELINES

FINAL 001

Mechanical 010

| | | |
|--|---------------|--------------------------|
| Verify central furnaces clearance for heater working space | FBC-M 306.1.1 | <input type="checkbox"/> |
| Verify opening/passageway sizes for appliance in attics | FBC-M 306.3 | <input type="checkbox"/> |
| Verify vented wall furnace located as not to create a fire | FBC-M 909.2 | <input type="checkbox"/> |
| Verify duct furnace installed per manufacturer's instructions | FBC-M 911.1 | <input type="checkbox"/> |
| Check heaters clearances to combustible material per manufacturer's instructions | FBC-M 912.3 | <input type="checkbox"/> |
| Check minimum duct size is as per furnace manufacturer's installation instructions | FBC-M 918.2 | <input type="checkbox"/> |
| Verify if unit heaters are installed per manufacturer's instructions | FBC-M 920.1 | <input type="checkbox"/> |
| Verify unit heaters suspended-type installed on non-combustible supports | FBC-M 920.2 | <input type="checkbox"/> |
| Verify radiant duct heaters installed per manufacturer's instructions | FBC-M 927.1 | <input type="checkbox"/> |
| Verify radiant duct heaters clearances, panels or elements to wiring or outlets | FBC-M 927.2 | <input type="checkbox"/> |
| Verify radiant panels installed on wood or steel conform to requirements | FBC-M 927.3 | <input type="checkbox"/> |

INSPECTION GUIDELINES

FINAL 001

Mechanical 011

| | | |
|---|-------------------|--------------------------|
| Verify duct coverings and linings meets 25/50 flame and smoke req. | FBC-M 604.3 | <input type="checkbox"/> |
| Verify duct coverings do not to penetrate walls/floors with fire-resistance ratings | FBC-M 604.6 | <input type="checkbox"/> |
| Verify linings are interrupted in area where occurs operation of a fire damper | FBC-M 604.8 | <input type="checkbox"/> |
| Verify insulated exterior ducts is protected weatherproof barrier | FBC-M 604.12 | <input type="checkbox"/> |
| Verify duct insulation minimum R- values applicable to climate zone 1 | FBC-ENRG C402.1.3 | <input type="checkbox"/> |

INSPECTION GUIDELINES

FINAL 001

Mechanical 015

| | | |
|--|--------------|--------------------------|
| Verify pipe supports intervals (Table) | FBC-M 305.4 | <input type="checkbox"/> |
| Verify pressure vessels piping, fittings, joints, connections/devices plans-designed | FBC-M 1003.2 | <input type="checkbox"/> |
| Verify Welds on pressure vessels are performed by an R-Stamp holder in accordance with the National Board Inspection Code, Part 3 an approved standard | FBC-M 1003.3 | <input type="checkbox"/> |

INSPECTION GUIDELINES

ROUGH/P-TEST 106

Mechanical 016

| | | |
|--|--------------------|--------------------------|
| Check and inspect underground-excavated trenches/ditches/chases pipes, tubes, ducts and related component per its specifications prior to backfill/concealment | FBC-B [A] 110.3(1) | <input type="checkbox"/> |
| Verify piping installed in or beneath concrete floors is encased in pipe duct | FBC-M 1107.2.1 | <input type="checkbox"/> |
| Verify before connecting ground/heat pump loop p-test @ 100 psi for 15 min | FBC-M 1208.1.1 | <input type="checkbox"/> |
| Verify ground source heat pump loop system p-test @ 100 psi for 15 min | FBC-M 1210.10 | <input type="checkbox"/> |
| Verify piping embedded in concrete pressure testing prior to pouring | FBC-M 1209.2 | <input type="checkbox"/> |

INSPECTION GUIDELINES

FINAL 001

Mechanical 016

| | | |
|---|--------------|--------------------------|
| Verify Pipe supports spacing as specified in Table 305.4 | FBC-M 305.4 | <input type="checkbox"/> |
| Verify boiler or modular boiler shutoff valves in the supply/return piping | FBC-M 1005.1 | <input type="checkbox"/> |
| Verify refrigerant pipes not placed in elevator, dumbwaiter or shafts | FBC-M 1107.2 | <input type="checkbox"/> |
| Verify refrigerant-pipes condensate protection to prevent damage | FBC-M 1107.4 | <input type="checkbox"/> |
| Verify materials for refrigerant pipe and tubing 1107.5.1 thru 1107.5.5 | FBC-M 1107.5 | <input type="checkbox"/> |
| Verify hydronic pipes systems exceeding 250 F- clearance 1" to combustibles | FBC-M 1206.5 | <input type="checkbox"/> |

INSPECTION GUIDELINES

ROUGH/P-TEST 106

Mechanical 019

| | | |
|--|-----------------|--------------------------|
| Verify Pipe supports spacing as specified in Table 305.4 | FBC-M 305.4 | <input type="checkbox"/> |
| Verify ductless mini-split equipment that produces condensate shall be provided with an inline check valve located in the drain line, or a trap | FBC-M 307.2.4.1 | <input type="checkbox"/> |
| Verify condensate drain lines are configured to permit the clearing of blockages and performance of maintenance without requiring the drain line to be cut | FBC-M 307.2.5 | <input type="checkbox"/> |
| Verify pipes installed in or beneath concrete floors are encased in pipe duct | FBC-M 1107.2.1 | <input type="checkbox"/> |
| Verify materials for refrigerant pipe and tubing 1107.5.1 thru 1107.5.5 | FBC-M 1107.5 | <input type="checkbox"/> |



INSPECTION GUIDELINES

FINAL 001

Mechanical 019

| | | |
|--|----------------|--------------------------|
| Verify raised roof equipment clearance | FBC-B 1522.3 | <input type="checkbox"/> |
| Verify Roof top piping minimum clearances from finish roof | FBC-B 1522.3.4 | <input type="checkbox"/> |
| Verify Roof equipment and supports are secured to the structure | FBC-M 301.15 | <input type="checkbox"/> |
| Verify appliances protection from damage | FBC-M 303.4 | <input type="checkbox"/> |
| Verify concrete pad level – extends not less than 3” inches above grade | FBC-M 304.10 | <input type="checkbox"/> |
| Verify appliances are permanently marked and identified to the area served | FBC-M 304.12 | <input type="checkbox"/> |
| Verify Locking access port Caps (tamper resistance) | FBC-M 1101.10 | <input type="checkbox"/> |

INSPECTION GUIDELINES

ROUGH 002

Mechanical 023

| | | |
|--|-----------------------------------|--------------------------|
| Verify metallic ducts shall be constructed as specified in the SMACNA HVAC Duct Construction Standards—Metal and Flexible. | FBC-M 603.4 | <input type="checkbox"/> |
| Verify contamination prevention-positive pressure, chimneys & vents/Exceptions: | FBC-M 601.4/(1)(2)(2.1)(2.2)(2.3) | <input type="checkbox"/> |
| Verify materials within plenums listed/labeled 25/50 – ASTM E 84 or UL 723 | FBC-M 602.2.1 | <input type="checkbox"/> |
| Verify space provided - air distribution systems (ducts components) | FBC-M 603.1.1 | <input type="checkbox"/> |
| Verify mechanically fastened (round metallic duct) min-3 sheet metal screws/rivets | FBC-M 603.4.1 | <input type="checkbox"/> |
| Verify flexible air connectors do not penetrating walls, floors or ceilings | FBC-M 603.6.2.2 | <input type="checkbox"/> |
| Verify joints. seams and connections | FBC-M 603.9 | <input type="checkbox"/> |
| Verify underground ducts installation – protective coating or encased 2” concrete | FBC-M 603.8 | <input type="checkbox"/> |
| Verify duct supports-not exceeds 12’ feet/SMACNA HVAC Standards (metal/flexible) | FBC-M 603.10 | <input type="checkbox"/> |
| Verify flexible duct supports and other factory-made ducts supports per manufactures’ installation instructions | FBC-M 603.10 | <input type="checkbox"/> |
| Verify ducts including linings, coverings, vibration isolation & connectors are installed on the exterior of the building shall be protected against the elements | FBC-M 603.16 | <input type="checkbox"/> |
| Verify flexible ducts & flexible air connectors is not penetrating rated assemblies | FBC-M 604.6 | <input type="checkbox"/> |
| Verify duct identification - legibly Printed at intervals not greater than 36” (3-ft) | FBC-M 604.7 | <input type="checkbox"/> |
| Verify ducts & air-transfer openings @ fire barriers | FBC-M 607.5.2 | <input type="checkbox"/> |
| Verify Fire dampers are listed & labeled, and complies with UL-555/S/C or in accordance with the requirements of testing as part of fire-resistive-rated floor/ceiling or roof/ceiling | FBC-M 607.3.1 | <input type="checkbox"/> |
| Verify ceiling fire damper ratings (TABLE 607.3.2.1) | FBC-M 607.3.2.1 | <input type="checkbox"/> |
| Verify smoke damper ratings | FBC-M 607.3.2.2 | <input type="checkbox"/> |
| Verify combination fire/smoke damper ratings | FBC-M 607.3.2.3 | <input type="checkbox"/> |
| Verify flexible ducts and air connectors does not pass through any fire-resistance-rated assembly | FBC-M [BF] 607.7 | <input type="checkbox"/> |
| Verify location and installation details of each fire damper, ceiling damper and smoke damper as shown, and identified by designer plans. | FBC-M 607.8 | <input type="checkbox"/> |



INSPECTION GUIDELINES

FINAL 001

Mechanical 023

| | | |
|---|-----------------|--------------------------|
| Verify space provided - air distribution systems (ducts components) | FBC-M 603.1.1 | <input type="checkbox"/> |
| Verify space provided - air distribution systems (ducts components) | FBC-M 603.1.1 | <input type="checkbox"/> |
| Verify retrofit, replacement not part of a renovation (exemption) | FBC-M 603.1.1 | <input type="checkbox"/> |
| Verify ducts protection for weather/protection against the elements | FBC-M 603.16 | <input type="checkbox"/> |
| Verify 6" lining/interruption upstream-downstream for elec./fuel-burning heaters | FBC-M 604.8 | <input type="checkbox"/> |
| Verify smoke detectors listed/label-complies with UL-268A/other detectors UL-268 | FBC-M 606.1 | <input type="checkbox"/> |
| Verify smoke detector exception where required (incapable of spreading smoke) | FBC-M 606.2 | <input type="checkbox"/> |
| Verify smoke detector in return air-systems w/designed capacity over/2000 cfms | FBC-606.2.1 | <input type="checkbox"/> |
| Verify area smoke detectors (exception) in return air-systems | FBC-606.2.1 | <input type="checkbox"/> |
| Verify multiple-air handling systems sharing a common supply/return/air ducts or plenums with a designed capacity over/2000 cfms are provided with smoke detectors | FBC-M 606.2.2 | <input type="checkbox"/> |
| Verify individual smoke detectors (exception) if each fan-terminal provided that such units do not have a designed capacity greater than 2000 cfms | FBC-M 606.2.2 | <input type="checkbox"/> |
| Verify return air risers serving two or more stories with a designed capacity greater than 15,000 cfms-smoke detectors installed at each story located upstream in return air riser before any air duct or plenums | FBC-M 606.2.3 | <input type="checkbox"/> |
| Verify smoke detector supervision audible/visible/connected to fire alarm system | FBC-M 606.4.1 | <input type="checkbox"/> |
| Verify supervisory signal (exception) – 1. smk./detector activates alarms appliances | FBC-M 606.4.1 | <input type="checkbox"/> |
| Verify occupancy without a fire alarm system (exception) – 2. smk./detector shall activates a visible/audible – Smoke detector trouble shall activate visible/audible signal | FBC-M 606.4.1 | <input type="checkbox"/> |
| Verify fire damper actuation device requirements | FBC-M 607.3.3.1 | <input type="checkbox"/> |
| Verify Smoke damper actuation close upon actuation | FBC-M 607.3.3.2 | <input type="checkbox"/> |
| Verify fire/smoke damper access and identification with an approved means of access – access point shall be permanently identified FIRE/SMOKE, SMOKE DAMPER OR FIRE DAMPER – access door shall be tight fitting and suitable for duct construction. | FBC-M 607.4 | <input type="checkbox"/> |
| Verify ceiling radiation dampers installed in accordance w/detail listed in the fire-resistance-rated assembly and the manufacturer's installation instructions and the listing | FBC-M 607.6.2.1 | <input type="checkbox"/> |
| Verify flexible ducts/air connectors do not penetrate fire-resistive rated assembly | FBC-M 607.7 | <input type="checkbox"/> |



INSPECTION GUIDELINES

FINAL 001

Mechanical 024

| | | |
|---|------------------------------|--------------------------|
| Verify Boiler- 400,000 Btuh/Temp 210 ° F/Tank capacities of 120 gal: Definitions | FBC-M 202 | <input type="checkbox"/> |
| Verify fuel-fired furnaces/boilers is listed for closets/alcoves installation | FBC-M 303.5 | <input type="checkbox"/> |
| Verify welding on pressure vessels are performed by an R-Stamp holder in accordance with the National Board Inspection Code, Part 3 and or with an approved standard | FBC-M 1003.3 | <input type="checkbox"/> |
| Verify manufacturer’s rating data and the nameplate is affixed to the boiler | FBC-M 1004.2 | <input type="checkbox"/> |
| Verify boilers shall be tested to a maximum level of 50 parts per million (ppm) of carbon monoxide as per OSHA guidelines. | FBC-M 1004.2.1 | <input type="checkbox"/> |
| Verify passageways around all 4-side of the boiler-(18 inches) | FBC-M 1004.3 | <input type="checkbox"/> |
| Verify boiler top clearances to ceiling/overhead obstructions TABLE 1004.3.1 | FBC-M 1004.3.1 | <input type="checkbox"/> |
| Verify boilers tanks/equipment secured as per manufacturer’s instructions | FBC-M 1004.4 | <input type="checkbox"/> |
| Verify mounted on noncombustible construction or listed for combustible flooring | FBC-M 1004.5 | <input type="checkbox"/> |
| Verify boiler rooms rating and enclosures installation (1hour rated) | FBC-B 453.7.8, FBC- M 1004.6 | <input type="checkbox"/> |
| Verify boiler rooms floor drain or other approved means for disposal | FBC-M 1004.6 | <input type="checkbox"/> |
| Verify safety/relief valves-installed into the safety relief valves openings | FBC-M 1006.5 | <input type="checkbox"/> |
| Verify safety/relief valves discharge pipes are same diameter as the valve outlet | FBC-M 1006.6 | <input type="checkbox"/> |
| Verify safety/relief valves high-press-steam discharges vents outside the structure | FBC-M 1006.6 | <input type="checkbox"/> |
| Verify controls/limit devices are installed per manufacturer’s instructions/listings | FBC-M 1006.7 | <input type="checkbox"/> |
| Verify steam and hot water boilers are protected with a low-water cutoff control/ Exception: A low-water cutoff is not required for coil/water-tube-type boilers protected with a flow sensing control | FBC-M 1007.1 | <input type="checkbox"/> |

INSPECTION GUIDELINES

FINAL 001

Mechanical 025

| | | |
|--|----------------|--------------------------|
| Verify conveyors and conveying systems complies with ASME B20.1 | FBC-B 3004.3 | <input type="checkbox"/> |
| Verify conveyors/related equipment/connecting enclosures openings protection | FBC-B 3004.3.1 | <input type="checkbox"/> |
| Verify conveyer's automatic limit switches | FBC-B 3004.3.2 | <input type="checkbox"/> |



INSPECTION GUIDELINES

ROUGH 002

Mechanical 038

| | | |
|--|-----------------|--------------------------|
| Verify kitchen hoods and other kitchen exhaust <i>equipment</i> , Sections 506.3.13, 506.4 and 506.5./Exception: Factory-built commercial kitchen grease ducts <i>listed and labeled</i> in accordance with UL 1978 | FBC-M 501.3.1 | <input type="checkbox"/> |
| Verify grease duct constructions of 16-gauge steel or 18-gauge stainless steel | FBC-M 506.3.1.1 | <input type="checkbox"/> |
| Verify makeup air ducts connecting 18 inches of a Type I hood /duct insulation installed within 18 inches a Type I hood shall be noncombustible | FBC-M 506.3.1.2 | <input type="checkbox"/> |
| Verify external hood joints/seams/penetrations be external liquid-tight weld | FBC-M 506.3.2 | <input type="checkbox"/> |
| Verify Type I hood - 18 inches" clearance to combustibles | FBC-M 507.9 | <input type="checkbox"/> |
| Verify Type I hood (exception)-clearance not required for cementitious wall board attached on non-combustible construction | FBC-M 507.9 | <input type="checkbox"/> |
| Verify ducts supports at intervals not to exceed-10 feet | FBC-M 510.9 | <input type="checkbox"/> |
| Verify supports constructed of noncombustible material | FBC-M 510.9 | <input type="checkbox"/> |
| Verify prior to the use or concealment of any portion of a grease duct system, a leakage test shall be performed. visually inspected on all sides | FBC-M 506.3.2.5 | <input type="checkbox"/> |
| Permit holder shall be responsible to provide the necessary equipment and perform the grease duct leakage test. A light test shall be performed to determine that all welded and brazed joints are liquid tight | FBC-M 506.3.2 | <input type="checkbox"/> |
| Verify grease duct cleanouts and openings shall comply with all of the following: 1,2,3,4,5,6,7 | FBC-M 506.3.8 | <input type="checkbox"/> |
| Verify underground grease duct installations shall comply with all the following: 1,2,3,4, 5,6 | FBC-M 506.3.10 | <input type="checkbox"/> |
| Verify kitchen grease duct serving a Type I hood penetrating ceiling, wall, floor any concealed space shall be enclosed from the point of penetration to the outlet terminal | FBC-M 506.3.11 | <input type="checkbox"/> |
| Verify commercial kitchen exhaust systems serving Type II hoods complies with Sections 506.4.1 and 506.4. | FBC-M 506.4 | <input type="checkbox"/> |
| Verify Up-blast fans serving Type I hoods and installed in a vertical or horizontal position shall be hinged, supplied with a flexible weatherproof electrical cable to permit inspection/ ductwork shall extend not less than 18 inches above the roof surface. | FBC-M 506.5.3 | <input type="checkbox"/> |



INSPECTION GUIDELINES

FINAL 001

Mechanical 038

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| Verify commercial kitchen hoods operate-during cooking operations | FBC-M 507.1.1 | <input type="checkbox"/> |
| Verify factory-built commercial hoods listed/labeled in accordance with UL 710 | FBC-M 507.1 | <input type="checkbox"/> |
| Verify factory-built commercial hoods exceptions: (1)(2)(3) | FBC-M 507.1 | <input type="checkbox"/> |
| Verify types I hoods are installed at or above all commercial cooking appliances | FBC-M 507.2 | <input type="checkbox"/> |
| Verify Type I hood exhaust fan interlock w/cooking appliances- interlock with exhaust systems shall not extinguish the pilot burners | FBC-M 507.1.1 | <input type="checkbox"/> |
| Verify heat or radiant energy sensors are utilized in hood systems consisting of multiple hoods served by a single exhaust system - sensors shall be provided in each hood | FBC-M 507.1.1 | <input type="checkbox"/> |
| Verify Type I hood grease filter minimum distance as specified in TABLE 507.11 | FBC-M 507.2.8 | <input type="checkbox"/> |
| Verify canopy size-location/overhang horizontal distant not less than 6" inches/Vertical distance between the front lower lip of hood surface of the appliance not to exceed 4' ft | FBC-M 507.4.1 | <input type="checkbox"/> |
| Verify Non-canopy hoods location is not greater than 3 feet above the cooking surface | FBC-M 507.4.2 | <input type="checkbox"/> |
| Verify Performance test – equipment/devices shall be provided by permit holder | FBC-M 507.6 | <input type="checkbox"/> |
| Verify capture and containment shall be visually observe with smoke, steam or produced by actual or simulated cooking or simulated cooking, such as with smoke candles | FBC-M 507.6.1 | <input type="checkbox"/> |
| Verify makeup air is supplied during cooking operation | FBC-M 508.1 | <input type="checkbox"/> |
| Verify makeup air to hood is electrically interlocked to exhaust system | FBC-M 508.1 | <input type="checkbox"/> |

INSPECTION GUIDELINES

FINAL 001

Mechanical 039

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| Verify cooling towers installed with an air conditioning/per manufacturer’s installation instructions and it’s listing in accordance with UL 1995 | FBC-M 908.1 | <input type="checkbox"/> |
| Verify cooling towers/evaporative condenser are accessible for service | FBC-M 908.2 | <input type="checkbox"/> |
| Verify outside air intake vents distances are 20’ ft. away from the cooling tower or cooling tower discharge plume is not less than 5 ft. above the intake opening | FBC-M 908.3 | <input type="checkbox"/> |
| Verify cooling tower restraints are per the FBC-Building | FBC-M 908.4 | <input type="checkbox"/> |
| Verify supports/anchorage is designed in accordance w/the FBC-Building | FBC-M 908.4 | <input type="checkbox"/> |
| Verify Drains/overflow/blow-down be approved for discharge of chemical waste | FBC-M 908.6 | <input type="checkbox"/> |



INSPECTION GUIDELINES

FINAL 001

Mechanical 040

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|---|---------------|--------------------------|
| Verify internal combustion engines/gas turbines/fuel storage and piping per (NFPA 37) - Stationary generator assemblies shall meet UL 2200 | FBC-M 915.1 | <input type="checkbox"/> |
| Verify permanent equipment/appliance powered by internal combustion engines/turbines are installed per manufacturers installation instruction and (NFPA 37) | FBC-M 915.2 | <input type="checkbox"/> |
| Verify ducts conveying explosive or flammable vapors, fumes or dust 30 feet from property lines,10 feet from operable openings into buildings | FBC-M 501.3.1 | <input type="checkbox"/> |
| Verify exhaust discharge clearances to walls, roofs, operable openings & grade | FBC-M 501.3.1 | <input type="checkbox"/> |
| Verify minimum distances location of exhaust outlets termination points | FBC-M 502.1.3 | <input type="checkbox"/> |



INSPECTION GUIDELINES

ROUGH 002

Mechanical 041

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| Verify manufacturer's instructions-dyer exhaust systems shall be independent of all other systems | FBC-M 504.1 | <input type="checkbox"/> |
| Verify air exhaust/intake openings are protected | FBC-M 501.3.2 | <input type="checkbox"/> |
| Verify dry/exhaust ducts terminating outdoor-protected with corrosion-resistant screens, louvers or grilles and shall be sized not less than 1/4 inch or be larger than 1/2 inch | FBC-M 501.3.2 | <input type="checkbox"/> |
| Verify domestic clothes dryer used smooth metal duct 4" inch round min. | FBC-M 504.6.1 | <input type="checkbox"/> |
| Verify dryers duct supports/secured overlapped joints in direction of airflow | FBC-M 504.6.2 | <input type="checkbox"/> |
| Verify dryer transition duct is 8-ft max - not concealed within the construction | FBC-M 504.6.3 | <input type="checkbox"/> |
| Verify dryer ducts specified/reduce lengths | FBC-M TABLE 504.8.4.1, FBC-R TABLE M1502.4.5.1 | <input type="checkbox"/> |
| Verify dryer exhaust duct total lengths 35-feet | FBC-M 504.8.4.1, FBC-R M1502.4.5.1 | <input type="checkbox"/> |
| Verify Protective shield plates shall be placed where nails or screws from finish or other work are likely to penetrate the clothes dryer exhaust duct | FBC-M 504.7 | <input type="checkbox"/> |
| Verify all exhaust systems shall discharge to the outdoors | FBC-R 1501.1 | <input type="checkbox"/> |
| Verify dryer exhaust duct length-35' from the connecting transition to termination | FBC-R 1502.4.4 | <input type="checkbox"/> |
| Verify (dryer) manufacturer's maximum length of the exhaust duct | FBC-R 1502.4.4.2 | <input type="checkbox"/> |
| Verify downdraft range hoods exception for scheduled-40 pipes/fittings | FBC-R 1503.2 | <input type="checkbox"/> |

INSPECTION GUIDELINES

FINAL 001

Mechanical 041

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| Verify blower door test for building or dwelling unit as having an air leakage rate not exceeding seven air changes per hour in Climate Zone 1 | FBC-ENRG R402.4.1.2 | <input type="checkbox"/> |
| Verify gravity outside air intake vents 10-ft from hazardous/noxious contaminant | FBC-M 401.4 | <input type="checkbox"/> |
| Verify exhaust/intake openings protection - screens/louvers/grilles | FBC-M-401.5 | <input type="checkbox"/> |
| Verify enclosed parking garages ventilation systems min. of - .05 cfms per/sq ft | FBC-M 404.2 | <input type="checkbox"/> |
| Verify dryer exh-vertical riser shall be provided with a means for cleanout | FBC-M 501.3 | <input type="checkbox"/> |
| Verify dryer ducts terminate outside of building with a back-draft damper | FBC-M 504.1 | <input type="checkbox"/> |
| Verify Domestic dryer exhaust duct power ventilators shall be listed and labeled to UL 705 FBC-M 504.6 | FBC-M 504.5 | <input type="checkbox"/> |
| Verify clothes dryer closets make-up air opening of 100 sq. /inches | FBC-M 504.6 | <input type="checkbox"/> |
| Verify termination of exhaust ducts discharge locations | FBC-M 501.3 | <input type="checkbox"/> |
| Verify exhaust air is not discharging directly onto walkways | FBC-M 501.3.1.1 | <input type="checkbox"/> |
| Verify combustion chimneys and vents | FBC-M 801.1 | <input type="checkbox"/> |
| Verify makeup air for clothes dryer exhaust more than 200 cfm's - makeup air have an opening area of not less than 100 square inches | FBC-M 614.6, FBC-(IFGC) [M] 614.6 | <input type="checkbox"/> |
| Verify vent terminals for direct-vent appliances per with manufacturer's specs. | FBC-M 804.1 | <input type="checkbox"/> |
| Verify natural draft venting of 9-inches between vent and building openings | FBC-M 804.2.1 | <input type="checkbox"/> |
| Verify forced draft venting of 12-inches between vent and building openings | FBC-M 804.2.1 | <input type="checkbox"/> |
| Verify termination of chimneys/vents power exhausters is 10-ft from lot lines | FBC-M 804.3.3 | <input type="checkbox"/> |
| Verify mechanical flue exhausters/venting system size per manufacturer's | FBC-M 804.3.7 | <input type="checkbox"/> |
| Verify identification dryer's length tag within 6' of dryer exh/duct connection | FBC-R 1502.4.5 | <input type="checkbox"/> |
| Verify exhaust duct cap/plugged and identified for future use/ prior to occupancy | FBC-R 1502.4.6 | <input type="checkbox"/> |
| Verify exhaust openings shall terminate 3' from property line/3' from openings areas into the building and 10' from mech/intakes except when 3' above | FBC-R 1503.2 | <input type="checkbox"/> |
| Verify ozone gas-generator rooms gas detection system/local alarm | FBC-B [F] 908.4 | <input type="checkbox"/> |
| Verify Carbon dioxide (CO ₂) systems | FBC-B [F] 908.7 | <input type="checkbox"/> |

INSPECTION GUIDELINES

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| Verify carbon monoxide protection/EXCEPTION (1) (2) | FBC-B [F] 908.8 | <input type="checkbox"/> |
| Verify ozone gas-generator rooms gas detection system | FBC [F] 908.4 | <input type="checkbox"/> |
| Verify repair garages flammable-gas protection system | FBC [F] 908.5 | <input type="checkbox"/> |
| Verify commercial cooking appliances are not installed dwelling units | FBC-M 917.2 | <input type="checkbox"/> |
| Verify household-type (cooking) appliances be listed/label for domestic use | FBC-M 917.3 | <input type="checkbox"/> |
| Verify bathrooms, water closet compartments and other similar rooms shall be provided with windows area of not less 3 square feet of which 1-half must be openable | FBC-R 303 | <input type="checkbox"/> |



INSPECTION GUIDELINES

FINAL 001

Mechanical 042

| | | |
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| Verify pressure vessels labels & installed per manufacturer's instructions | FBC-M 1003.1 | <input type="checkbox"/> |
| Verify pressure vessels is stamped per ASME Boiler and Pressure Vessel | FBC-M 1003.1 | <input type="checkbox"/> |
| Verify piping materials/fittings/joints/connections/devices per plans | FBC-M 1003.2 | <input type="checkbox"/> |
| Verify welders compliance with nationally recognized welding certification | FBC-M 1003.3 | <input type="checkbox"/> |

INSPECTION GUIDELINES

FINAL 001

Mechanical 043

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| Verify automatic fire-extinguishing systems installed, inspected, and tested | FBC-B [F] 904.1 | <input type="checkbox"/> |
| Verify system interlocking by design and installation for the hazard | FBC-B [F] 904.3.3 | <input type="checkbox"/> |
| Verify fire-extinguishing systems are monitored by the building alarm system | FBC-B [F] 904.3.5 | <input type="checkbox"/> |
| Verify commercial Type I hood fire suppression system | FBC-B [F] 904.11, FBC-M 509.1 | <input type="checkbox"/> |
| Verify system interlocking by design and installation for the hazard | FBC-B [F] 904.11 | <input type="checkbox"/> |
| Verify cooking fire suppression system automatically shut down fuel/electrical power - reset to be manual | FBC-B [F] 904.11.2 | <input type="checkbox"/> |



INSPECTION GUIDELINES

FINAL 001

Mechanical 044

| | | |
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| Verify manufacturer's equipment and appliance installation instructions at time of inspection | FBC-M 304.1 | <input type="checkbox"/> |
| Verify factory built-fireplaces installed in dwelling units shall comply with the HT requirements of UL 103- be marked "residential type/building heating appliance chimney" | FBC-M 805.2 | <input type="checkbox"/> |
| Verify factory-built chimney offset angles not less than 30 degrees/shall not contained more than 4 elbows | FBC-M 805.3 | <input type="checkbox"/> |
| Verify decorative shrouds is listed & labeled - specific factory-built chimney system | FBC-M 805.6 | <input type="checkbox"/> |
| Verify metal chimneys installed in accordance with NFPA 211 | FBC-M 806.1 | <input type="checkbox"/> |

INSPECTION GUIDELINES

FINAL 001

Mechanical 045

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| Verify manufacturer's equipment (fans) and appliance installation instructions at time of inspection- ductless | FBC-M 304.1 <input type="checkbox"/> |
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INSPECTION GUIDELINES

FINAL 001

Mechanical 046

| | | |
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| Verify termination point of exhaust discharge distances | FBC-M 501.3.1 | <input type="checkbox"/> |
| Verify limited spraying spaces ventilation system (6-complete air changes) | FBC-M 502.7.2 | <input type="checkbox"/> |
| Verify electric motors driving exhaust fans are not within booths or ducts | FBC-M 502.7.3.6 | <input type="checkbox"/> |
| Verify fan and housing are of nonferrous/non-sparking materials | FBC-M 502.7.3.6 | <input type="checkbox"/> |
| Verify belts or pulleys are fully enclosed not exposed in air systems | FBC-M 502.7.3.6 | <input type="checkbox"/> |
| Verify spraying operations shutdown when ventilation system is not operating | FBC-M 502.7.3.1 | <input type="checkbox"/> |



INSPECTION GUIDELINES

FINAL 001

Mechanical 048

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| Verify Smoke control systems subject to provisions of FBC-909 | FBC-B [F] 909, FBC-M 513.3 | <input type="checkbox"/> |
| Verify building special inspectors-tests and documents per plans | FBC-B [F] 909.3 | <input type="checkbox"/> |
| Verify special inspections agency expertise in fire protection engineering, mechanical engineering and certification as air balancers | FBC-B [F] 909.18.8.2 | <input type="checkbox"/> |
| Verify special inspects-report shall be filed w/the fire code official-Building | BC-B [F] 909.18.8.3.1 | <input type="checkbox"/> |
| Verify acceptance/tested in the presence of the Fire official to confirm that the system is operating in compliance within the system requirements | FBC-B 909.19 | <input type="checkbox"/> |

INSPECTION GUIDELINES

FINAL 001

Mechanical 050

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|---|----------------------------|--------------------------|
| Verify roof mounted equipment per HVHZ requirements | FBC-B 1522.2, FBC-M 301.15 | <input type="checkbox"/> |
| Verify roof mounted machinery, piping, ductwork, signs compliance w/height req. | FBC 1522.3 | <input type="checkbox"/> |
| Verify raised roof stands legs height are in accordance with (TABLE) 1522.3 | FBC-B 1522.3 | <input type="checkbox"/> |



INSPECTION GUIDELINES

FINAL 001

Mechanical 052

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| Verify elevator Inspector's- QEI reports final and approved for owner operation | FBC-B [A] 110.3 | <input type="checkbox"/> |
| Verify hard-wired working phone in the elevator cab is operational - [Residential] | FBC-B [A] 110.3 | <input type="checkbox"/> |



INSPECTION GUIDELINES

(QUALITY ASSURANCE INSPECTION)

Permit by Affidavit

| | | |
|---|-----------------|--------------------------|
| Verify Final-collect all inspection reports (documentation) from private provider pertaining to mechanical inspection were approved for quality assurance Administrative Order 4-120 | FBC-B [A] 107.6 | <input type="checkbox"/> |
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