

TEST & BALANCE DEFICIENCY CLASSIFICATION

SITE CONDITIONS



CRITICAL <i>Unable to Perform T&B Scope until GC corrects</i>	REVIEW + RECTIFY <i>Review Deficiency w/ EOR, Owner, GC to determine Action Required</i>	NON-CRITICAL <i>Proceed with T&B Scope & Note as Deficiency</i>
<ul style="list-style-type: none"> • Building does not have permanent power. • Site conditions: i.e. Ceiling tiles are not installed, ceiling grid is not installed, glass is not installed around play space, no doors on building, too many trades working at once, etc. • No ladders on site, or roof ladder not yet installed on building. • Electrical circuit serving equipment not connected, finalized and/or not per NEC and/or IOM. • Incorrect MFR of devices or equipment Installed-Non-National Accounts Approved Brands. 		<ul style="list-style-type: none"> • Equipment and device labels not installed per plans. Includes RTUs, EFs, T-Stats, Ansul Pull Station, Annunciators.

EXHAUST SYSTEM



CRITICAL <i>Unable to Perform T&B Scope until GC corrects</i>	REVIEW + RECTIFY <i>Review Deficiency w/ EOR, Owner, GC to determine Action Required</i>	NON-CRITICAL <i>Proceed with T&B Scope & Note as Deficiency</i>
<ul style="list-style-type: none"> • Loose or missing access doors on the grease ductwork. • Grease exhaust duct dampers (Halton – Kitchen Volume Damper (Model K) or Manual Volume Damper (Model MBD) not installed or in wrong locations. • Symmetrical duct wye at hoods not installed per plans. • RR fans are not operational. • Wrong HP motor in rooftop exhaust equipment. • Short radius or mitered (Square 90's) type ells on the grease ductwork. • Exhaust Fan Motors Burn-out due to improper start-up. • Incorrect MFR of devices or equipment Installed-Non-National Accounts Approved Brands. 	<ul style="list-style-type: none"> • Exhaust fans and RTUs on the wrong curbs • Capture Jet duct not installed per plans and/or shops. • Side Capture Jet plenum not installed per plans and/or shops. • Hood(s) installed at incorrect height. • Grease duct not sloped per plans. 	<ul style="list-style-type: none"> • Grease drip trays at grease EF's not installed per plans and/or IOM. • Cabinet penetration in capture jet fan not sealed. • Grease duct insulation not per specifications. • HVAC or grease duct Insulation not per local AHJ requirements. R6 vs R8, 1 or 2 layers, etc. • Hood trim angles not installed. • Hood hangers not installed per plans and shop dwgs. • Equipment and device labels not installed per plans. Includes RTUs, EFs, T-Stats, Ansul Pull Station, Annunciators.

ROOF TOP UNIT



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<ul style="list-style-type: none"> • Wrong HP motor in rooftop equipment. • RTU fan motors burn-out due to improper startup. • Economizers sticking or do not open in unison. • Incorrect MFR of devices or equipment Installed-Non-National Accounts Approved Brands. 	<ul style="list-style-type: none"> • RTU leaking air into curb due to base pan bent, or gasket not installed. • AC P Traps incorrectly constructed. • Incorrect options on equipment. • Barometric and/or power relief damper assembly not functioning. 	<ul style="list-style-type: none"> • Extra set of AC filters not provided per specs. • Equipment not secured to curbs and/or structure per plans or due to High Wind and/or Seismic designs per plans. • Deck not cut at duct penetrations per plans. • RTU's not level. • RTU filters are dirty and/or incorrect type. • Equipment and device labels not installed per plans. Includes RTUs, EFs, T-Stats, Ansul Pull Station, Annunciators.

AIR DISTRIBUTION



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<ul style="list-style-type: none"> • No turning vanes or incorrect turning vanes installed. • No dampers installed in the run-outs on an AC system. • Ductwork leaking enough air to drop below the 10% allowance. (System) • In-line manual volume damper jammed and restricting airflow. • Run-outs not attached to diffusers/missing. ductwork or diffusers, no end cap installed on trunk main. • Duct sizes not per plans. • Damper handles on top of ductwork. • Missing the transition in the supply drop. • Incorrect MFR of devices or equipment Installed-Non-National Accounts Approved Brands. 	<ul style="list-style-type: none"> • Dampers are not opening or closing due to obstructions in the start collars. • Excessive amounts of flex/flex in drops. • Diffusers air pattern deflectors are not field adjusted to prints. Either the 2x2 diffusers in kitchen, office or drive thru, or the hard ceiling supply grills. • Flex ducts are not installed per the M-5.1 print instructions. • 36" gap between the drop and 1st tap was not maintained. • Missing mastic on the runout to diffusers and air devices or duct not sealed per specs and/or SMACNA. • Duct hangers at RTU duct drops must be installed so as to minimize duct weight hanging from curb duct rails. 	<ul style="list-style-type: none"> • Missing or improperly located flex connector in drop. • Duct hangers not installed per SMACNA. • Duct construction not per SMACNA. • HVAC insulation not installed per specs, SMACNA and/or IOM. • Duct insulation damaged due to exposure to elements or due to other trades. • Duct smoke detectors not located per plans and/or sample tubes plugged and/or not operational. • Equipment and device labels not installed per plans. Includes RTUs, EFs, T-Stats, Ansul Pull Station, Annunciators.

CONTROLS



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<ul style="list-style-type: none"> • Hard ceilings electronic dampers are not operational/no diagram of diffuser-damper layout relative to centralized control panel. • Incorrect MFR of devices or equipment Installed-Non-National Accounts Approved Brands. 	<ul style="list-style-type: none"> • Equipment controls not installed or configured per plans. • Incorrect control wiring type/gauge used and/or wiring not installed per plans and/or equipment IOM. 	<ul style="list-style-type: none"> • Sensors not installed as shown on plans. • Thermostat control sensors out of calibration. • Equipment and device labels not installed per plans. Includes RTUs, EFs, T-Stats, Ansul Pull Station, Annunciators.

MISC EQUIPMENT



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<ul style="list-style-type: none"> • Incorrect MFR of devices or equipment Installed-Non-National Accounts Approved Brands. 		<ul style="list-style-type: none"> • Air curtains not installed per plans and IOM. • Air curtain controls not installed or adjusted per plans/IOM. • Equipment and device labels not installed per plans. Includes RTUs, EFs, T-Stats, Ansul Pull Station, Annunciators.

DEFINITIONS:

System or Zone: Roof Top Unit (RTU)/Exhaust Fan (EF) and inter-connected air distribution network (Ductwork).

Building System: All associated individual systems/zones in function with one another to achieve design requirements.

TAB: Testing, Adjusting and Balancing Firm

GC: General Contractor

OR: 3rd Party Owners Representative Construction Manager

Owner: Chick-fil-A, Inc. Program Manager

NOTES:

Mechanical Contractor present and capable of resolving issues while T&B in process can shift status of deficiency.