The following text is informational only and shall serve as an informational guide for HVAC contractors, journeymen, and apprentices working in the Heating, Ventilation, and Air Conditioning industry. This document shall NOT be used as a replacement for the **2007 Kentucky Residential Code or 2007 Kentucky Building Code**. In accordance with the 2007 Kentucky Residential Code, *final interpretation and authority with regard to this text is granted to the inspector*. (see IRC R104.1)

Furthermore, as emphasized in the 2007 Kentucky Building Code, all Heating Ventilation, and Air Conditioning work shall be conducted, installed, and completed in a *workmanlike* and acceptable manner so as to secure the results intended by the code.

HVAC CODE CHECKLISTS

Residential Package Dual-Fuel Heat Pump Checklist

- 1. Verify unobstructed return duct size from return air openings to unit. *Must be a minimum of six (6) sq. in. per 1000 btu's for heat pumps.* (Per IRC M1403.1)
- 2. Verify that return is equipped with a filter allowing even distribution of air flow across the filter. (Per IMC 605.1.3)
- 3. Verify return path to central return with transfer grills, undercut doors or individual returns. (Per Manual D 1-9)
- 4. Verify return air is not being taken from any of the following: closet, bathroom, toilet room, kitchen, garage, mechanical room, furnace room, or other dwelling units. (Per IRC M1602.2(4))
- 5. Verify supply duct sizing. If design is questionable, a Manual D must be provided. (Per IRC M1601.1)
- 6. Verify no duct openings are located in garage. Any duct passing through a garage must be 26-guage steel. (Per IRC R309.1.1)
- 7. Verify supply and return ducts are four inches (4") off the ground. (Per IRC M1601.3.6)
- 8. Verify all exterior ducts are protected against the elements. (Per IRC M1601.3.4(2))
- 9. Verify if vibration isolators are required by MII. If required, they are not to exceed ten inches (10") in length. (Per IRC 1601.2.2)
- 10. Verify all joints are sealed on both supply and return ducts with approved tapes or mastics. (Per IRC M1601.3.1)
- 11. Verify all ducts, supply, return, panning, runs and boots, are insulated to R-4 in unconditioned areas. (Per IRC N1103.2.1) Insulation has been revised from R-8 to R-4 by the 2007 Kentucky Residential code.
- 12. Verify penetration of foundations with ducts is rodent proof. (Per IRC 2404.9)
- 13. Verify all flex ducts are installed as per MII and are as straight as possible, strapped every four to five feet (4-5') with one and a half inch (1-1/2") wide straps and no kinks or sharp bends. (Per MII and ADC)
- 14. Verify all metal ducts are strapped every ten feet (10'). (Per IRC M1601.3.2)
- 15. Verify all fire rated assembles penetrated with duct or boots are "fire blocked" with approved fire block material. (Per IRC R602.8(4))
- 16. Verify dryer ducts are limited to twenty-five feet (25') in length. One ninety (90) degree = five feet (5'). One forty-five (45) degree = two and a half feet (2 ½'). Shall be metal with no screws which extend into the duct. (Per IRC M1502.5-2.6)

- 17. Verify dryer duct terminates to the outside of the building and not less than three feet (3') in any direction from any opening into the building. Duct termination must be equipped with back draft damper and shall not be screened. (Per IRC M1502.2)
- 18. If kitchen exhaust is used, a minimum of one hundred (100) cfm intermittent, twenty-five (25) cfm continuous. (Per IRC M1507.3)
- 19. Verify bathroom exhaust is fifty (50) cfm intermittent, twenty (20) cfm continuous if no operable windows. (Per IRC M1507.3)
- 20. Verify bathroom exhaust duct is a class 1 or class 0 type ducts and must exhaust to the outside of the building/structure. (Per IRC M1601.1.1(2), M1507.2)

- 1. Wood-framed structural members shall be drilled, notched, or altered in accordance with the provisions of sections IRC R502.8, IRC R602.6, IRC R602.6.1, and IRC R802.7. Steel-Framed, load bearing members shall be permitted only in accordance with sections IRC R505.2, IRC R603.2, IRC R804.2, and IRC M1308.1.
- 2. Any piping through rafters, joists, or studs shall be kept one and a half inches (1.5") from any edge. (Per IRC M1308.2)

Equipment

- 1. Verify heating and cooling equipment and appliances are installed in accordance with the MII and the requirements of this code. (Per IRC M1401.1)
- Verify heating and cooling equipment is sized based on building loads calculated in accordance with ACCA Manual J or other approved methods. (Per IRC M1401.3)
- 3. Verify manufacturer's instructions are with appliances and were followed. (Per IRC M1307.1)
- 4. Verify outside equipment is on a level concrete slab or other approved materials. (Per IMC 304.9)
- 5. Verify heat pumps are three inches (3") off the pad. (Per IRC M1403.2)
- 6. Verify clearances around equipment. (Per MII)
- 7. Verify disconnect is installed and all wiring is protected by conduit on outside equipment. (Per IRC E4001.5 table and NEC)
- 8. Verify thermostat wires are protected to resist sunlight and physical damage. (Per IRC E3702.3.2-3.3)
- 9. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 10. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 11. Verify wiring is sized for maximum load. (Per NEC)

Gas

- 1. Verify gas shut-off is installed within six feet (6') of appliance. (Per IRC G2420.5)
- 2. Verify sediment trap is installed. Note: ranges and clothes dryers do not need one. (Per IRC G2419.4)
- 3. Verify hard pipe is used to access exterior of appliance cabinet. (Per IRC G2422.1.2.3)

Residential Package Heat Pump Checklist

- 1. Verify unobstructed return duct size from return air openings to unit. *Must be a minimum of six (6) sq. in. per 1000 btu's for heat pumps.* (Per IRC M1403.1)
- Verify return is equipped with a filter allowing even distribution of air flow across the filter. (Per IMC 605.1.3)

- 3. Verify return path to central return with transfer grills, undercut doors or individual returns. (Per Manual D 1-9)
- 4. Verify return air is not being taken from any of the following: closet, bathroom, toilet room, kitchen, garage, mechanical room, furnace room, or other dwelling units. (Per IRCM1602.2(4))
- 5. Verify supply duct sizing. If design is questionable, a Manual D must be provided. (Per IRC M1601.1)
- 6. Verify no duct openings in garage. Any duct passing through a garage must be 26-gauge steel. (Per IRC R309.1.1)
- 7. Verify supply and return ducts are four inches (4") off the ground. (Per IRC M1601.3.6)
- 8. Verify all exterior ducts are protected against the elements. (Per IRC M1601.3.4(2))
- 9. Verify if vibration isolators are required by MII. If required, they are not to exceed ten inches (10") in length. (Per IRC 1601.2.2)
- 10. Verify all joints are sealed on both supply and return ducts with approved tapes or mastics. (Per IRC M1601.3.1)
- 11. Verify all ducts, supply, return, panning, runs and boots, are insulated to R-4 in unconditioned areas. (Per IRC N1103.2.1) *Insulation has been revised from R-8 to R-4 by the 2007 Kentucky Residential code.*
- 12. Verify penetration of foundations with ducts is rodent-proof. (Per IRC G2404.9)
- 13. Verify all flex ducts are installed as per MII and are as straight as possible, strapped every four to five feet (4'-5') with one and a half inch (1-1/2") wide straps with no kinks or sharp bends. (Per MII and ADC)
- 14. Verify all metal ducts are strapped every ten feet (10'). (Per IRC M1601.3.2)
- 15. Verify all fire rated assembles penetrated with duct or boots are "fire blocked" with approved fire block material. (Per IRC R602.8(4))
- 16. Verify dryer ducts are limited to twenty-five feet (25') in length. One 90 degree = five feet (5'). One 45 degree = two and a half feet (2 ½'). Shall be metal with no screws which extend into the duct. (Per IRC M1502.5-2.6)
- 17. Verify dryer duct terminates to the outside of the building and not less than three feet (3') in any direction from any opening into the building. Duct termination must be equipped with back draft damper and shall not be screened. (Per IRC M1502.2)
- 18. If kitchen exhaust is used, a minimum of one hundred (100) cfm intermittent, twenty-five (25) cfm continuous. (Per IRC M1507.3)
- 19. Verify bathroom exhaust is fifty (50) cfm intermittent, twenty (20) cfm continuous if no operable windows. (Per IRC M1507.3)
- 20. Verify bathroom exhaust duct is a class 1 or class 0 type ducts and must exhaust to the outside of the building/structure. (Per IRC M1601.1.1(2), M1507.2)

- Wood-framed structural members shall be drilled, notched, or altered in accordance with the provisions of sections IRC R502.8, IRC R602.6, IRC R602.6.1, and IRC R802.7. Steel-Framed, load bearing members shall be permitted only in accordance with sections IRC R505.2, IRC R603.2, IRC R804.2, and IRC M1308.1.
- 2. Any piping through rafters, joists, or studs shall be kept one and a half inches (1.5") from any edge. (Per IRC M1308.2)

Equipment

- 1. Verify heating and cooling equipment and appliances are installed in accordance with the MII and the requirements of this code. (Per IRC M1401.1)
- 2. Verify heating and cooling equipment is sized based on building loads calculated in accordance with ACCA Manual J or other approved methods. (Per IRC M1401.3)
- 3. Verify manufacturer's instructions are with appliances and were followed. (Per IRC M1307.1)
- 4. Verify outside equipment is on a level concrete slab or other approved materials. (Per IMC 304.9)
- 5. Verify heat pumps are three inches (3") off the pad. (Per IRC M1403.2)
- 6. Verify clearances around equipment. (Per MII)
- 7. Verify disconnect is installed and all wiring is protected by conduit on outside equipment. (Per IRC E4001.5 table and NEC)
- 8. Verify thermostat wires are protected to resist sunlight and physical damage. (Per IRC E3702.3.2-3.3)
- 9. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 10. Verify total KW of heat strips. (Per MII)
- 11. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 12. Verify wiring is sized for maximum load. (Per NEC)

Residential Split- 80% Furnace with Air Checklist

- 1. Verify that return is equipped with a filter allowing even distribution of air flow across the filter. (Per IMC 605.1.3)
- 2. Verify return air is not being taken from any of the following: closet, bathroom, toilet room, kitchen, garage, mechanical room, furnace room, or other dwelling units. (Per IRC M1602.2(4)
- 3. Verify return path to central return with transfer grills, undercut doors or individual returns. (Per Manual D 1-9)
- 4. Verify supply duct sizing. If design is questionable, a Manual D must be provided. (Per IRC M1601.1)
- 5. Verify no duct openings are located in garage. Any duct passing through a garage must be 26-guage steel. (Per IRC R309.1.1)
- 6. Verify supply and return ducts are four inches (4") off the ground. (Per IRC M1601.3.6)
- 7. Verify if vibration isolators are required by MII. If required, they are not to exceed ten inches (10") in length. (Per IRC 1601.2.2)
- Verify all joints are sealed on both supply and return ducts with approved tapes or mastics. (Per IRC M1601.3.1)
- 9. Verify all ducts, supply, return, panning, runs and boots, are insulated to R-4 in unconditioned areas. (Per IRC N1103.2.1) Insulation has been revised from R-8 to R-4 by the 2007 Kentucky Residential code.
- Verify all flex ducts are installed as per MII and are as straight as possible, strapped every four to five feet (4-5') with one and a half inch (1-1/2") wide straps and no kinks or sharp bends. (Per MII and ADC)
- 11. Verify all metal ducts are strapped every ten feet (10'). (Per IRC M1601.3.2)
- 12. Verify all fire rated assembles penetrated with duct or boots are "fire blocked" with approved fire block material. (Per IRC R602.8(4)
- 13. Verify dryer ducts are limited to twenty-five feet (25') in length. One ninety (90) degree = five feet (5'). One forty-five (45) degree = two and a half feet (2 ½'). Shall be metal with no screws which extend into the duct. (Per IRC M1502.5-2.6)

- 14. Verify dryer duct terminates to the outside of the building and not less than three feet (3') in any direction from any opening into the building. Duct termination must be equipped with back draft damper and shall not be screened. (Per IRC M1502.2)
- 15. If kitchen exhaust is used, a minimum of one hundred (100) cfm intermittent, twenty-five (25) cfm continuous. (Per IRC M1507.3)
- 16. Verify bathroom exhaust is fifty (50) cfm intermittent, twenty (20) cfm continuous if no operable windows. (Per IRC M1507.3)
- 17. Verify bathroom exhaust duct is a class 1 or class 0 type ducts and must exhaust to the outside of the building/structure. (Per IRC M1601.1.1(2), M1507.2)

- 1. Wood-framed structural members shall be drilled, notched, or altered in accordance with the provisions of sections IRC R502.8, IRC R602.6, IRC R602.6.1, and IRC R802.7. Steel-Framed, load bearing members shall be permitted only in accordance with sections IRC R505.2, IRC R603.2, IRC R804.2, and IRC M1308.1.
- 2. Any piping through rafters, joists, or studs shall be kept one and a half inches (1.5") from any edge. (Per IRC M1308.2)

Equipment

- 1. Verify heating and cooling equipment and appliances are installed in accordance with the MII and the requirements of this code. (Per IRC M1401.1)
- 2. Verify heating and cooling equipment is sized based on building loads calculated in accordance with ACCA Manual J or other approved methods. (Per IRC M1401.3)
- 3. Verify manufacturer's instructions are with appliances and were followed. (Per IRC M1307.1)
- 4. Verify equipment in a garage with an ignition source is raised 18" above the floor. (Per IRC M1307.3)
- 5. Verify equipment in garage is protected from impact. (Per IRC M1307.3.1)
- 6. Verify appliances located in compartments, alcoves, basements, or similar spaces have an unobstructed passageway that is 22" wide with a level service space of thirty by thirty inches (30"x30") in front of the appliance door. (Per IRC M1305.1.2)
- 7. Verify equipment located within compartments or alcoves are at least twelve inches (12") larger than the appliance. (Per IRC M1305.1.1)
- 8. Verify outside equipment is on a level concrete slab or other approved materials. (Per IMC 304.9)
- 9. Verify outdoor equipment is installed three inches (3") above finished grade and is in accordance with MII. (Per IRC M1308.3)
- 10. Verify disconnect is installed and all wiring is protected by conduit on outside equipment. (Per IRC E4001.5 table and NEC)
- 11. Verify thermostat wires are protected to resist sunlight and physical damage. (Per IRC E3702.3.2-3.3)
- 12. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 13. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 14. Verify wiring is sized for maximum load. (Per NEC)

Combustion Air

- 1. Verify combustion air is not being taking from any of the following: sleeping rooms, bathrooms, or toilet rooms. (Per IRC M1701.4)
- 2. Verify combustion air method follows manufacturer's instructions.

- 3. The following are some examples of approved combustion air methods:
 - <u>IRC M1702.1</u>
 - Volume of space in which appliance is installed is greater than 50 cubic feet per 1000 btu's
 - <u>IRC M1702.2</u>

Confined space "using adjacent spaces:" one opening within 12" of the ceiling and one within 12" of the floor but not less than 100 sq. inches.

• <u>IRC M1703.2</u>

Outside combustion air supplied through openings or ducts, one opening within 12" of the ceilingandonewithin12"ofthefloor,connecting directly with the crawl and attic space.

• IRC M1703.2.1

Openings communicating directly with the outdoors through vertical ducts: each opening shall have 1 sq. inch per 4000 btu's.

- IRC, M1703.2.1 Horizontal ducts communicating with the outdoors: each opening shall have 1 sq. inch per 2000 btu's.
- IRC M1703.4-M1703.2(4)

Under-floor combustion air using foundation louvers must be 1 sq. inch per 4000 btu's.

Venting

1. Verify venting type and method of venting. (Clearance to combustibles, number of appliances connected, horizontal length, 1/4" per foot rise, roof penetration height, etc.) *Determine also if chimney liner is needed or required*. (Per 2009 NFPA-54)

Gas

- 1. Verify gas shut off is installed within six feet (6') of appliance. (Per IRC G2420.5)
- 2. Verify sediment trap is installed. Note: ranges and clothes dryers do not need one. (Per IRC G2419.4)
- 3. Verify hard pipe is used to access exterior of appliance cabinet. (Per IRC G2422.1.2.3)

Attic Appliances

- 1. Verify appliances in attics have a minimum 20"x30" clear opening or large enough to remove the largest appliance. Must have an unobstructed passageway of 22" wide & 30" high, no farther away than 20'. A level working space must be provided, 30"wide x 30" deep where access is required. If the passageway is not less than 6' high the appliance can be moved back to 50' away. (Per IRC M1305.1.3 (2))
- 2. Verify a light controlled by a switch at the opening and a receptacle near the appliance. (Per IRC M1305.1.4.3)
- 3. Verify primary drain line is installed to discharge condensate to an approved place for disposal. (Per MII and IRC M1411.3)
- 4. Verify an auxiliary drain pan is installed under the appliance and is one and a half inches (1 ½") deep and three inches (3") wider than the appliance. The pan shall drain to a conspicuous location, a float switch, or other approved method. (Per IRC M1411.3.1(1))
- 5. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 6. Verify disconnecting means. (Per IRC E4001.5 table)
- 7. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 8. Verify wiring is sized for maximum load. (Per NEC)

Under Floor Appliances

1. Verify appliances under floors have a 22"x30" rough opening or large enough to remove the largest appliance. Must have an unobstructed passageway of 22" wide and 30"high and be no farther away than

20'. A level working space must be provided that is 30"wide x 30"deep where access is required. If the passageway is not less than six feet (6') high, the appliance has an unlimited distance. (Per IRC M1305.1.4)

- 2. Verify a light controlled by a switch at the opening and a receptacle near the appliance. (Per IRC M1305.1.4.3)
- 3. Verify appliances supported from the ground are on a level concrete slab. Appliances suspended from the floor must have a clearance of six inches (6") from the ground. (Per IRC M1305.1.4.1)
- 4. Verify a primary drain line is installed to discharge condensate to an approved location. (Per IRC M1411.3)
- 5. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 6. Verify disconnecting means. (Per IRC E4001.5 table)
- 7. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 8. Verify wiring is sized for maximum load. (Per NEC)

Residential Dual-Fuel Split Heat Pump Checklist

Ducts

- 1. Verify unobstructed return duct size from return air openings to unit. *Must be a minimum of six (6) sq. in. per 1000 btu's for heat pumps.* (Per IRC M1403.1)
- 2. Verify that return is equipped with a filter allowing even distribution of air flow across the filter. (Per IMC 605.1.3)
- 3. Verify return path to central return with transfer grills, undercut doors or individual returns. (Per Manual D 1-9)
- 4. Verify return air is not being taken from any of the following: closet, bathroom, toilet room, kitchen, garage, mechanical room, furnace room, or other dwelling units. (Per IRC M1602.2(4))
- 5. Verify supply duct sizing. If design is questionable, a Manual D must be provided. (Per IRC M1601.1)
- 6. Verify no duct openings are located in garage. Any duct passing through a garage must be 26-guage steel. (Per IRC R309.1.1)
- 7. Verify supply and return ducts are four inches (4") off the ground. (Per IRC M1601.3.6)
- 8. Verify all exterior ducts are protected against the elements. (Per IRC M1601.3.4(2))
- 9. Verify if vibration isolators are required by MII. If required, they are not to exceed ten inches (10") in length. (Per IRC 1601.2.2)
- 10. Verify all joints are sealed on both supply and return ducts with approved tapes or mastics. (Per IRC M1601.3.1)
- 11. Verify all ducts, supply, return, panning, runs and boots, are insulated to R-4 in unconditioned areas. (Per IRC N1103.2.1) Insulation has been revised from R-8 to R-4 by the 2007 Kentucky Residential code.
- Verify all flex ducts are installed as per MII and are as straight as possible, strapped every four to five feet (4-5') with one and a half inch (1-1/2") wide straps and no kinks or sharp bends. (Per MII and ADC)
- 13. Verify all metal ducts are strapped every ten feet (10'). (Per IRC M1601.3.2)
- 14. Verify all fire rated assembles penetrated with duct or boots are "fire blocked" with approved fire block material. (Per IRC R602.8(4))

** Verify dryer ducts are limited to twenty-five feet (25') in length. One ninety (90) degree = five feet (5'). One forty-five (45) degree = two and a half feet (2 $\frac{1}{2}$ '). Shall be metal with no screws which extend into the duct. (Per IRC M1502.5-2.6)

- 15. Verify dryer duct terminates to the outside of the building and not less than three feet (3') in any direction from any opening into the building. Duct termination must be equipped with back draft damper and shall not be screened. (Per IRC M1502.2)
- 16. If kitchen exhaust is used, a minimum of one hundred (100) cfm intermittent, twenty-five (25) cfm continuous. (Per IRC M1507.3)
- 17. Verify bathroom exhaust is fifty (50) cfm intermittent, twenty (20) cfm continuous if no operable windows. (Per IRC M1507.3)
- 18. Verify bathroom exhaust duct must be a class 1 or class 0 type ducts & must exhaust to the outside. IRC,M1601.1.1(2) & IRC, M1507.2

- Wood-framed structural members shall be drilled, notched, or altered in accordance with the provisions of sections IRC R502.8, IRC R602.6, IRC R602.6.1, and IRC R802.7. Steel-Framed, load bearing members shall be permitted only in accordance with sections IRC R505.2, IRC R603.2, IRC R804.2, and IRC M1308.1.
- 2. Any piping through rafters, joists, or studs shall be kept one and a half inches (1.5") from any edge. (Per IRC M1308.2)

Equipment

- 1. Verify heating and cooling equipment and appliances are installed in accordance with the MII and the requirements of this code. (Per IRC M1401.1)
- 2. Verify heating and cooling equipment is sized based on building loads calculated in accordance with ACCA Manual J or other approved methods. (Per IRC M1401.3)
- 3. Verify manufacturer's instructions are with appliances and were followed. (Per IRC M1307.1)
- 4. Verify equipment in a garage with an ignition source is raised 18" above the floor. (Per IRC M1307.3)
- 5. Verify equipment in garage is protected from impact. (Per IRC M1307.3.1)
- 6. Verify appliances located in compartments, alcoves, basements, or similar spaces have an unobstructed passageway that is 22" wide with a level service space of thirty by thirty inches (30"x30") in front of the appliance door. (Per IRC M1305.1.2)
- 7. Verify equipment located within compartments or alcoves are at least twelve inches (12") larger than the appliance. (Per IRC M1305.1.1)
- 8. Verify condensate drain is protected from freezing.
- 9. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 10. Verify outside equipment is on a level concrete slab or other approved materials. (Per IMC 304.9)
- 11. Verify heat pumps are three inches (3") off the pad. (Per IRC M1403.2)
- 12. Verify disconnect is installed and all wiring is protected by conduit on outside equipment. (Per IRC E4001.5 table and NEC)
- 13. Verify thermostat wires are protected to resist sunlight and physical damage. (Per IRC E3702.3.2-3.3)
- 14. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 15. Verify wiring is sized for maximum load. (Per NEC)

Combustion Air

- 1. Verify combustion air is not being taking from any of the following: sleeping rooms, bathrooms, or toilet rooms. (Per IRC M1701.4)
- 2. Verify combustion air method follows manufacturer's instructions.

Venting

1. Verify venting follows manufacturer's instructions.

Gas

- 1. Verify gas shut off is installed within six feet (6') of appliance. (Per IRC G2420.5)
- 2. Verify sediment trap is installed. Note: ranges and clothes dryers do not need one. (Per IRC G2419.4)
- 3. Verify hard pipe is used to access exterior of appliance cabinet. (Per IRC G2422.1.2.3)

Attic Appliances

Verify appliances in attics have a minimum 20"x30" clear opening or large enough to remove the largest appliance. Must have an unobstructed passageway of 22" wide & 30" high, no farther away than 20'. A level working space must be provided, 30" wide x 30" deep where access is required. If the passageway is not less than 6' high the appliance can be moved back to 50' away. (Per IRC M1305.1.3 (2))

- 1. Verify a light controlled by a switch at the opening and a receptacle near the appliance. (Per IRC M1305.1.4.3)
- 2. Verify primary drain line is installed to discharge condensate to an approved place for disposal. (Per MII and IRC M1411.3)
- 3. Verify an auxiliary drain pan is installed under the appliance and is one and a half inches (1 ¹/₂") deep and three inches (3") wider than the appliance. The pan shall drain to a conspicuous location, a float switch, or other approved method. (Per IRC M1411.3.1(1)
- 4. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 5. Verify disconnecting means. (Per IRC E4001.5 table)
- 6. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 7. Verify wiring is sized for maximum load. (Per NEC)

Under Floor Appliances

- 1. Verify appliances under floors have a 22"x30" rough opening or large enough to remove the largest appliance. Must have an unobstructed passageway of 22" wide and 30"high and be no farther away than 20'. A level working space must be provided that is 30"wide x 30"deep where access is required. If the passageway is not less than six feet (6') high, the appliance has an unlimited distance. (Per IRC M1305.1.4)
- 2. Verify a light controlled by a switch at the opening and a receptacle near the appliance. (Per IRC M1305.1.4.3)
- 3. Verify appliances supported from the ground are on a level concrete slab. Appliances suspended from the floor must have a clearance of six inches (6") from the ground. (Per IRC M1305.1.4.1)
- 4. Verify a primary drain line is installed to discharge condensate to an approved location. (Per IRC M1411.3)
- 5. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 6. Verify disconnecting means. (Per IRC E4001.5 table)
- 7. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 8. Verify wiring is sized for maximum load. (Per NEC)

Residential Package Gas Pack Checklist

Ducts

- 1. Verify that return is equipped with a filter allowing even distribution of air flow across the filter. (Per IMC 605.1.3)
- 2. Verify return path to central return with transfer grills, undercut doors or individual returns. (Per Manual D 1-9)
- 3. Verify return air is not being taken from any of the following: closet, bathroom, toilet room, kitchen, garage, mechanical room, furnace room, or other dwelling units. (Per IRC M1602.2(4))
- 4. Verify supply duct sizing. If design is questionable, a Manual D must be provided. (Per IRC M1601.1)
- 5. Verify no duct openings are located in garage. Any duct passing through a garage must be 26-guage steel. (Per IRC R309.1.1)
- 6. Verify supply and return ducts are four inches (4") off the ground. (Per IRC M1601.3.6)
- 7. Verify all exterior ducts are protected against the elements. (Per IRC M1601.3.4(2))
- 8. Verify if vibration isolators are required by MII. If required, they are not to exceed ten inches (10") in length. (Per IRC 1601.2.2)
- Verify all joints are sealed on both supply and return ducts with approved tapes or mastics. (Per IRC M1601.3.1)
- 10. Verify all ducts, supply, return, panning, runs and boots, are insulated to R-4 in unconditioned areas. (Per IRC N1103.2.1) Insulation has been revised from R-8 to R-4 by the 2007 Kentucky Residential code.
- 11. Verify penetration of foundations with ducts is rodent proof. (Per IRC 2404.9)
- 12. Verify all flex ducts are installed as per MII and are as straight as possible, strapped every four to five feet (4-5') with one and a half inch (1-1/2") wide straps and no kinks or sharp bends. (Per MII and ADC)
- 13. Verify all metal ducts are strapped every ten feet (10'). (Per IRC M1601.3.2)
- 14. Verify all fire rated assembles penetrated with duct or boots are "fire blocked" with approved fire block material. (Per IRC R602.8(4))
- 15. Verify dryer ducts are limited to twenty-five feet (25') in length. One ninety (90) degree = five feet (5'). One forty-five (45) degree = two and a half feet (2 ½'). Shall be metal with no screws which extend into the duct. (Per IRC M1502.5-2.6)
- 16. Verify dryer duct terminates to the outside of the building and not less than three feet (3') in any direction from any opening into the building. Duct termination must be equipped with back draft damper and shall not be screened. (Per IRC M1502.2)
- 17. If kitchen exhaust is used, a minimum of one hundred (100) cfm intermittent, twenty-five (25) cfm continuous. (Per IRC M1507.3)
- 18. Verify bathroom exhaust is fifty (50) cfm intermittent, twenty (20) cfm continuous if no operable windows. (Per IRC M1507.3)
- 19. Verify bathroom exhaust duct is a class 1 or class 0 type ducts and must exhaust to the outside of the building/structure. (Per IRC M1601.1.1(2), M1507.2)

Drilling and Notching

1. Wood-framed structural members shall be drilled, notched, or altered in accordance with the provisions of sections IRC R502.8, IRC R602.6, IRC R602.6.1, and IRC R802.7. Steel-Framed, load bearing

members shall be permitted only in accordance with sections IRC R505.2, IRC R603.2, IRC R804.2, and IRC M1308.1.

2. Any piping through rafters, joists, or studs shall be kept one and a half inches (1.5") from any edge. (Per IRC M1308.2

Equipment

- 1. Verify heating and cooling equipment and appliances are installed in accordance with the MII and the requirements of this code. (Per IRC M1401.1)
- 2. Verify heating and cooling equipment is sized based on building loads calculated in accordance with ACCA Manual J or other approved methods. (Per IRC M1401.3)
- 3. Verify manufacturer's instructions are with appliances and were followed. (Per IRC M1307.1)
- 4. Verify outside equipment is on a level concrete slab or other approved materials. (Per IMC 304.9)
- 5. Verify heat pumps are three inches (3") off the pad. (Per IRC M1403.2)
- 6. Verify clearances around equipment. (Per MII
- 7. Verify disconnect is installed and all wiring is protected by conduit on outside equipment. (Per IRC E4001.5 table and NEC)
- 8. Verify thermostat wires are protected to resist sunlight and physical damage. (Per IRC E3702.3.2-3.3)
- 9. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 10. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 11. Verify wiring is sized for maximum load. (Per NEC)

Gas

- 1. Verify gas shut-off is installed within six feet (6') of appliance. (Per IRC G2420.5)
- 2. Verify sediment trap is installed. Note: ranges and clothes dryers do not need one. (Per IRC G2419.4)
- 3. Verify hard pipe is used to access exterior of appliance cabinet. (Per IRC G2422.1.2.3)

Residential Geo-Thermal Checklist

- 1. Verify unobstructed return duct size from return air openings to unit. *Must be a minimum of six (6) sq. in. per 1000 btu's for heat pumps.* (Per IRC M1403.1)
- 2. Verify that return is equipped with a filter allowing even distribution of air flow across the filter. (Per IMC 605.1.3)
- 3. Verify return path to central return with transfer grills, undercut doors or individual returns. (Per Manual D 1-9)
- 4. Verify return air is not being taken from any of the following: closet, bathroom, toilet room, kitchen, garage, mechanical room, furnace room, or other dwelling units. (Per IRC M1602.2(4))
- 5. Verify supply duct sizing. If design is questionable, a Manual D must be provided. (Per IRC M1601.1)
- 6. Verify no duct openings are located in garage. Any duct passing through a garage must be 26-guage steel. (Per IRC R309.1.1)
- 7. Verify supply and return ducts are four inches (4") off the ground. (Per IRC M1601.3.6)
- 8. Verify if vibration isolators are required by MII. If required, they are not to exceed ten inches (10") in length. (Per IRC 1601.2.2)

- 9. Verify all joints are sealed on both supply and return ducts with approved tapes or mastics. (Per IRC M1601.3.1)
- 10. Verify all ducts, supply, return, panning, runs and boots, are insulated to R-4 in unconditioned areas. (Per IRC N1103.2.1) Insulation has been revised from R-8 to R-4 by the 2007 Kentucky Residential code.
- 11. Verify all flex ducts are installed as per MII and are as straight as possible, strapped every four to five feet (4-5') with one and a half inch (1 ¹/₂") wide straps and no kinks or sharp bends. (Per MII and ADC)
- 12. Verify all metal ducts are strapped every ten feet (10'). (Per IRC M1601.3.2)
- 13. Verify all fire rated assembles penetrated with duct or boots are "fire blocked" with approved fire block material. (Per IRC R602.8(4))
- 14. Verify dryer ducts are limited to twenty-five feet (25') in length. One ninety (90) degree = five feet (5'). One forty-five (45) degree = two and a half feet (2 ½'). Shall be metal with no screws which extend into the duct. (Per IRC M1502.5-2.6)
- 15. Verify dryer duct terminates to the outside of the building and not less than three feet (3') in any direction from any opening into the building.
- Duct termination must be equipped with back draft damper and shall not be screened. (Per IRC M1502.2)
- 17. If kitchen exhaust is used, a minimum of one hundred (100) cfm intermittent, twenty-five (25) cfm continuous. (Per IRC M1507.3Verify bathroom exhaust must be 50 cfm intermittent, 20 cfm continuous if no operable windows. IRC,M1507.3
- 18. Verify bathroom exhaust is fifty (50) cfm intermittent, twenty (20) cfm continuous if no operable windows. (Per IRC M1507.3)
- 19. Verify bathroom exhaust duct is a class 1 or class 0 type ducts and must exhaust to the outside of the building/structure. (Per IRC M1601.1.1(2), M1507.2)

- 1. Wood-framed structural members shall be drilled, notched, or altered in accordance with the provisions of sections IRC R502.8, IRC R602.6, IRC R602.6.1, and IRC R802.7. Steel-Framed, load bearing members shall be permitted only in accordance with sections IRC R505.2, IRC R603.2, IRC R804.2, and IRC M1308.1.
- 2. Any piping through rafters, joists, or studs shall be kept one and a half inches (1.5") from any edge. (Per IRC M1308.2)

Equipment

- 1. Verify heating and cooling equipment and appliances are installed in accordance with the MII and the requirements of this code. (Per IRC M1401.1)
- 2. Verify heating and cooling equipment is sized based on building loads calculated in accordance with ACCA Manual J or other approved methods. (Per IRC M1401.3)
- 3. Verify manufacturer's instructions are with appliances and were followed. (Per IRC M1307.1)
- 4. Verify loop system holds a 30-minute pressure test at 100psi before backfilling. (Per IRC 2105.1)
- 5. Verify equipment in a garage with an ignition source is raised eighteen inches (18") above the floor. Per IRC M1307.3)
- 6. Verify appliances located in compartments, alcoves, basements, or similar spaces have an unobstructed passageway that is 22" wide with a level service space of thirty by thirty inches (30"x30") in front of the appliance door. (Per IRC M1305.1.2)

- 7. Verify equipment located within compartments or alcoves are at least twelve inches (12") larger than the appliance. (Per IRC M1305.1.1)
- 8. Verify equipment in garages is protected from impact. (Per IRC M1307.3.1)
- 9. Verify outside equipment is on a level concrete slab or other approved materials. (Per IMC 304.9)
- 10. Verify heat pumps are three inches (3") off the pad. (Per IRC M1403.2)
- 11. Verify disconnect is installed and all wiring is protected by conduit on outside equipment. (Per IRC E4001.5 table and NEC)
- 12. Verify thermostat wires are protected to resist sunlight and physical damage. (Per IRC E3702.3.2-3.3)
- 13. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 14. Verify total KW of heat strips. (Per MII)
- 15. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 16. Verify wiring is sized for maximum load. (Per NEC)

Under Floor Appliances

- 1. Verify appliances under floors have a 22"x30" rough opening or large enough to remove the largest appliance. Must have an unobstructed passageway of 22" wide and 30"high and be no farther away than 20'. A level working space must be provided that is 30"wide x 30"deep where access is required. If the passageway is not less than six feet (6') high, the appliance has an unlimited distance. (Per IRC M1305.1.4)
- 2. Verify a light controlled by a switch at the opening and a receptacle near the appliance. (Per IRC M1305.1.4.3)
- 3. Verify appliances supported from the ground are on a level concrete slab. Appliances suspended from the floor must have a clearance of six inches (6") from the ground. (Per IRC M1305.1.4.1)
- 4. Verify a primary drain line is installed to discharge condensate to an approved location. (Per IRC M1411.3)
- 5. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 6. Verify disconnecting means. (Per IRC E4001.5 table)
- 7. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 8. Verify wiring is sized for maximum load. (Per NEC)

Residential Split- 90% Furnace with Air Checklist

- 1. Verify that return is equipped with a filter allowing even distribution of air flow across the filter. (Per IMC 605.1.3)
- 2. Verify return air is not being taken from any of the following: closet, bathroom, toilet room, kitchen, garage, mechanical room, furnace room, or other dwelling units. (Per IRC M1602.2(4))
- Verify return path to central return with transfer grills, undercut doors or individual returns. (Per Manual D 1-9)
- 4. Verify supply duct sizing. If design is questionable, a Manual D must be provided. (Per IRC M1601.1)
- 5. Verify no duct openings in garage. Ducts passing through a garage must be 26 gauge steel. IRC,R309.1.1
- 6. Verify supply and return ducts are four inches (4") off the ground. (Per IRC M1601.3.6)
- 7. Verify if vibration isolators are required by MII. If required, they are not to exceed ten inches (10") in length. (Per IRC 1601.2.2)

- 8. Verify all joints are sealed on both supply and return ducts with approved tapes or mastics. (Per IRC M1601.3.1)
- 9. Verify all ducts, supply, return, panning, runs and boots, are insulated to R-4 in unconditioned areas. (Per IRC N1103.2.1) Insulation has been revised from R-8 to R-4 by the 2007 Kentucky Residential code.
- Verify all flex ducts are installed as per MII and are as straight as possible, strapped every four to five feet (4-5') with one and a half inch (1-1/2") wide straps and no kinks or sharp bends. (Per MII and ADC)
- 11. Verify all metal ducts are strapped every ten feet (10'). (Per IRC M1601.3.2)
- 12. Verify all fire rated assembles penetrated with duct or boots are "fire blocked" with approved fire block material. (Per IRC R602.8(4))
- 13. Verify dryer ducts are limited to twenty-five feet (25') in length. One ninety (90) degree = five feet (5'). One forty-five (45) degree = two and a half feet (2 ½'). Shall be metal with no screws which extend into the duct. (Per IRC M1502.5-2.6)
- 14. Verify dryer duct terminates to the outside of the building and not less than three feet (3') in any direction from any opening into the building. Duct termination must be equipped with back draft damper and shall not be screened. (Per IRC M1502.2)
- 15. If kitchen exhaust is used, a minimum of one hundred (100) cfm intermittent, twenty-five (25) cfm continuous. (Per IRC M1507.3)
- 16. Verify bathroom exhaust is fifty (50) cfm intermittent, twenty (20) cfm continuous if no operable windows. (Per IRC M1507.3)
- 17. Verify bathroom exhaust duct is a class 1 or class 0 type ducts and must exhaust to the outside of the building/structure. (Per IRC M1601.1.1(2), M1507.2)

Drilling & Notching

- 1. Wood-framed structural members shall be drilled, notched, or altered in accordance with the provisions of sections IRC R502.8, IRC R602.6, IRC R602.6.1, and IRC R802.7. Steel-Framed, load bearing members shall be permitted only in accordance with sections IRC R505.2, IRC R603.2, IRC R804.2, and IRC M1308.1.
- 2. Any piping through rafters, joists, or studs shall be kept one and a half inches (1.5") from any edge. (Per IRC M1308.2)

Equipment

- 1. Verify heating and cooling equipment and appliances are installed in accordance with the MII and the requirements of this code. (Per IRC M1401.1)
- 2. Verify heating and cooling equipment is sized based on building loads calculated in accordance with ACCA Manual J or other approved methods. (Per IRC M1401.3)
- 3. Verify manufacturer's instructions are with appliances and were followed. (Per IRC M1307.1)
- 4. Verify equipment in a garage with an ignition source is raised 18" above the floor. (Per IRC M1307.3)
- 5. Verify equipment in garage is protected from impact. (Per IRC M1307.3.1)
- Verify appliances located in compartments, alcoves, basements or similar spaces have an unobstructed passageway 22" wide, with a level service space of 30"x 30" in front of the appliance door. (Per IRC M1305.1.2)
- 7. Verify equipment located within compartments or alcoves are at least 12" larger than the appliance. (Per IRC M1305.1.1)

- 8. Verify condensate drain is protected from freezing. (Per MII)
- 9. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 10. Verify outside equipment is on a level concrete slab or other approved materials. (Per IMC 304.9)
- 11. Verify outdoor equipment is installed three inches (3") above finished grade and is in accordance with MII. (Per IRC M1308.3)
- 12. Verify disconnect is installed and all wiring is protected by conduit on outside equipment. (Per IRC E4001.5 table and NEC)
- 13. Verify thermostat wires are protected to re Verify thermostat wires are protected to resist sunlight and physical damage. (Per IRC E3702.3.2-3.3)
- 14. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 15. Verify wiring is sized for maximum load. (Per NEC)

Combustion Air

- 1. Verify combustion air is not being taking from any of the following: sleeping rooms, bathrooms, or toilet rooms. (Per IRC M1701.4)
- 2. Verify combustion air method follows manufacturer's instructions.

Venting

1. Verify venting follows manufacturer's instructions.

Gas

- 1. Verify gas shut of is installed within six feet (6') of appliance. (Per IRC G2420.5)
- 2. Verify sediment trap is installed. Note: ranges and clothes dryers do not need one. (Per IRC G2419.4)
- 3. Verify hard pipe is used to access exterior of appliance cabinet. (Per IRC G2422.1.2.3)

Attic Appliances

- 1. Verify appliances in attics have a minimum 20"x30" clear opening or large enough to remove the largest appliance. Must have an unobstructed passageway of 22" wide & 30" high, no farther away than 20'. A level working space must be provided, 30"wide x 30" deep where access is required. If the passageway is not less than 6' high the appliance can be moved back to 50' away. (Per IRC M1305.1.3 (2))
- 2. Verify a light controlled by a switch at the opening and a receptacle near the appliance. (Per IRC M1305.1.4.3)
- 3. Verify primary drain line is installed to discharge condensate to an approved place for disposal. (Per MII and IRC M1411.3)
- 4. Verify an auxiliary drain pan is installed under the appliance and is one and a half inches (1 ¹/₂") deep and three inches (3") wider than the appliance. The pan shall drain to a conspicuous location, a float switch, or other approved method. (Per IRC M1411.3.1(1))
- 5. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 6. Verify disconnecting means. (Per IRC E4001.5 table)
- 7. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 8. Verify wiring is sized for maximum load. (Per NEC)

Under Floor Appliances

1. Verify appliances under floors have a 22"x30" rough opening or large enough to remove the largest appliance. Must have an unobstructed passageway of 22" wide and 30"high and be no farther away than 20'. A level working space must be provided that is 30"wide x 30"deep where access is required. If the

passageway is not less than six feet (6') high, the appliance has an unlimited distance. (Per IRC M1305.1.4)

- 2. Verify a light controlled by a switch at the opening and a receptacle near the appliance. (Per IRC M1305.1.4.3)
- 3. Verify appliances supported from the ground are on a level concrete slab. Appliances suspended from the floor must have a clearance of six inches (6") from the ground. (Per IRC M1305.1.4.1)
- 4. Verify a primary drain line is installed to discharge condensate to an approved location. (Per IRC M1411.3)
- 5. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 6. Verify disconnecting means. (Per IRC E4001.5 table)
- 7. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 8. Verify wiring is sized for maximum load. (Per NEC)

Residential Split Heat Pump Checklist

- 1. Verify unobstructed return duct size from return air openings to unit. *Must be a minimum of six (6) sq. in. per 1000 btu's for heat pumps.* (Per IRC M1403.1)
- 2. Verify return is equipped with a filter allowing even distribution of air flow across the filter. (Per IMC 605.1.3)
- 3. Verify return path to central return with transfer grills, undercut doors or individual returns. (Per Manual D 1-9)
- 4. Verify return air is not being taken from any of the following: closet, bathroom, toilet room, kitchen, garage, mechanical room, furnace room, or other dwelling units. (Per IRCM1602.2(4))
- 5. Verify supply duct sizing. If design is questionable, a Manual D must be provided. (Per IRC M1601.1)
- Verify no duct openings in garage. Any duct passing through a garage must be 26-gauge steel. (Per IRC R309.1.1)
- 7. Verify supply and return ducts are four inches (4") off the ground. (Per IRC M1601.3.6)
- 8. Verify if vibration isolators are required by MII. If required, they are not to exceed ten inches (10") in length. (Per IRC 1601.2.2)
- 9. Verify all joints are sealed on both supply and return ducts with approved tapes or mastics. (Per IRC M1601.3.1)
- 10. Verify all ducts, supply, return, panning, runs and boots, are insulated to R-4 in unconditioned areas. (Per IRC N1103.2.1) Insulation has been revised from R-8 to R-4 by the 2007 Kentucky Residential code.
- 11. Verify all flex ducts are installed as per MII and are as straight as possible, strapped every four to five feet (4'-5') with one and a half inch (1-1/2") wide straps with no kinks or sharp bends. (Per MII and ADC)
- 12. Verify all metal ducts are strapped every ten feet (10'). (Per IRC M1601.3.2)
- 13. Verify all fire rated assembles penetrated with duct or boots are "fire blocked" with approved fire block material. (Per IRC R602.8(4))
- 14. Verify dryer ducts are limited to twenty-five feet (25') in length. One 90 degree = five feet (5'). One 45 degree = two and a half feet (2 ½'). Shall be metal with no screws which extend into the duct. (Per IRC M1502.5-2.6)

- 15. Verify dryer duct terminates to the outside of the building and not less than three feet (3') in any direction from any opening into the building Duct termination must be equipped with back draft damper and shall not be screened. (Per IRC M1502.2)
- 16. If kitchen exhaust is used, a minimum of one hundred (100) cfm intermittent, twenty-five (25) cfm continuous. (Per IRC M1507.3)
- 17. Verify bathroom exhaust must be 50 cfm intermittent, 20 cfm continuous if no operable windows. IRC,M1507.3
- 18. Verify bathroom exhaust is fifty (50) cfm intermittent, twenty (20) cfm continuous if no operable windows. (Per IRC M1507.3)

Drilling & Notching

- 1. Wood-framed structural members shall be drilled, notched, or altered in accordance with the provisions of sections IRC R502.8, IRC R602.6, IRC R602.6.1, and IRC R802.7. Steel-Framed, load bearing members shall be permitted only in accordance with sections IRC R505.2, IRC R603.2, IRC R804.2, and IRC M1308.1.
- 2. Any piping through rafters, joists, or studs shall be kept one and a half inches (1.5") from any edge. (Per IRC M1308.2)

Equipment

- 1. Verify heating and cooling equipment and appliances are installed in accordance with the MII and the requirements of this code. (Per IRC M1401.1)
- 2. Verify heating and cooling equipment is sized based on building loads calculated in accordance with ACCA Manual J or other approved methods. (Per IRC M1401.3)
- 3. Verify manufacturer's instructions are with appliances and were followed. (Per IRC M1307.1)
- 4. Verify outside equipment is on a level concrete slab or other approved materials. (Per IMC 304.9)
- Verify appliances located in compartments, alcoves, basements or similar spaces have an unobstructed passageway 22" wide, with a level service space of 30"x 30" in front of the appliance door. (Per IRC M1305.1.2)
- 6. Verify equipment located within compartments or alcoves are at least 12" larger than the appliance. (Per IRC M1305.1.1)
- 7. Verify equipment in garage is protected from impact. (Per IRC M1307.3.1)
- 8. Verify outside equipment is on a level concrete slab or other approved materials. (Per IMC 304.9)
- 9. Verify heat pumps are three inches (3") off the pad. (Per IRC M1403.2)
- 10. Verify disconnect is installed and all wiring is protected by conduit on outside equipment. (Per IRC E4001.5 table and NEC)
- 11. Verify thermostat wires are protected to resist sunlight and physical damage. (Per IRC E3702.3.2-3.3)
- 12. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 13. Verify total KW of heat strips. (Per MII)
- 14. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 15. Verify wiring is sized for maximum load. (Per NEC)

Attic Appliances

1. Verify appliances in attics have a minimum 20"x30" clear opening or large enough to remove the largest appliance. Must have an unobstructed passageway of 22" wide & 30" high, no farther away than 20'. A

level working space must be provided, 30"wide x 30" deep where access is required. If the passageway is not less than 6' high the appliance can be moved back to 50' away. (Per IRC M1305.1.3 (2))

- 2. Verify a light controlled by a switch at the opening and a receptacle near the appliance. (Per IRC M1305.1.4.3)
- 3. Verify primary drain line is installed to discharge condensate to an approved place for disposal. (Per MII and IRC M1411.3)
- 4. Verify an auxiliary drain pan is installed under the appliance and is one and a half inches (1 ½") deep and three inches (3") wider than the appliance. The pan shall drain to a conspicuous location, a float switch, or other approved method. (Per IRC M1411.3.1(1))
- 5. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 6. Verify disconnecting means. (Per IRC E4001.5 table)
- 7. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 8. Verify wiring is sized for maximum load. (Per NEC)

Under Floor Appliances

- Verify appliances under floors have a 22"x30" rough opening or large enough to remove the largest appliance. Must have an unobstructed passageway of 22" wide and 30"high and be no farther away than 20'. A level working space must be provided that is 30"wide x 30"deep where access is required. If the passageway is not less than six feet (6') high, the appliance has an unlimited distance. (Per IRC M1305.1.4)
- 2. Verify a light controlled by a switch at the opening and a receptacle near the appliance. (Per IRC M1305.1.4.3)
- 3. Verify appliances supported from the ground are on a level concrete slab. Appliances suspended from the floor must have a clearance of six inches (6") from the ground. (Per IRC M1305.1.4.1)
- 4. Verify a primary drain line is installed to discharge condensate to an approved location. (Per IRC M1411.3)
- 5. Verify a condensate trap is installed. (Per MII and IMC 307.2.4)
- 6. Verify disconnecting means. (Per IRC E4001.5 table)
- 7. Verify breakers are sized as per equipment data plate. (Per MII and NEC)
- 8. Verify wiring is sized for maximum load. (Per NEC)