RESIDENTIAL ENERGY EFFICIENCY DISCLOSURE

OWNER/CONTRACTOR_____

PROJECT ADDRESS_____

Slab:

This applies to slab on grade and walkout basements

☐ On grade portion (≤ 2' below grade), then minimum R-10, ≥ 4' under slab and along slab edge.

Walls Below Grade:

☐ ≥ R-19 cavity or

☐ ≥ R-15 Continuous Insulation

Rim Joist:

☐ ≥ R- 20 cavity or

☐ If 2" X 4" construction, then R-13 cavity + R-5 continuous (exterior)

Above Grade Walls:

☐ ≥ R-20 cavity or

☐ If 2" X 4" construction, then R-13 cavity + R-5 continuous (exterior)

Attic Insulation:

☐ ≥ R-49

☐ R-38 shall be deemed to satisfy the requirement for R-49 wherever the full height of uncompressed R-38 insulation extends over the wall top plate at the eaves

Crawlspaces:

Same requirements as Below Grade Walls

Cantilever Floors (Both exterior or into a garage area):

☐ ≥R-30, (or insulation sufficient to fill the framing cavity, R-19 minimum)

Fenestration U-Factor:

☐ Windows ≤0.32 (SHGC is not applicable as Climate Zone 6 is a heating dominated climate)

☐ Sylights ≤0.55 (SHGC is not applicable as Climate Zone 6 is a heating dominated climate)

Mechanical Ventilation:

☐ Required to meet the requirements of the IRC or IMC, or with approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

Lighting:

☐ ≥ 75% of lamps in permanently installed (hardwired) fixtures shall contain only high-efficiency lamps.

Equipment Sizing:

☐ Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other *approved* heating and cooling calculation methodologies.

Service Hot Water:

☐ Circulating hot water systems shall be provided with an automatic or readily *accessible* manual switch that can turn off the hot-water circulating pump when the system is not in use.

Controls: At least one thermostat shall be provided for each separate heating and cooling system.

☐ Where the primary heating system is forced-air furnace, at least one thermostat per dwelling unit shall be capable of controlling the heating and cooling system on a daily schedule to maintain different temperature set points at different times of the day. This thermostat shall include the capability to set back or temporarily operate the system to maintain zone temperatures down to 55°F or up to 85°F.

Mechanical System Piping Insulation:

☐ Mechanical system piping capable of carrying fluids above 105°F or below 55°F shall be insulated to a minimum of R-3.

Testing:

☐ The building or dwelling unit shall be tested and verified as having an air leakage rate not to exceeding 5 air changes per hour in Climate Zones 1 and 2, and 4 air changes per hour in Climate Zones 3 through 8. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 pascals). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the testing shall be signed by the third party conducting the testing and provided to the code official. Testing shall be performed at any time after the creation of all penetrations of the building thermal envelope.

- During Testing:
- Exterior windows and doors, fireplaces and stove doors shall be closed, but not sealed beyond the intended weather-stripping or other infiltration measures;
- Dampers including exhaust, intake, makeup air, backdraft and flues shall be closed, but not sealed beyond intended infiltration control measures;
- Interior door, if installed at the time of test, shall be open;
- Exterior doors for continuous ventilation systems and heat recovery ventilation shall be closed and sealed;
- Heating and cooling systems, if installed at the time of testing, shall be turned off; and
- Supply and return registers, if installed at the time of testing, shall be fully open.

R403.2.2 Sealing:

☐ Ducts, air handlers, and filter boxes shall be sealed. Joints and seams shall comply with either the International Mechanical Code or International Residential Code, as applicable.

EXCEPTIONS:

- Air-impermeable spray foam products shall be permitted to be applied without additional joint seals
- Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed potion of the joint to prevent a hinge effect.
- Continuously welded and locking-type longitudinal joints and seams in ducts operating at a static pressure less than 2 inches water column (500Pa) pressure classification shall not require additional closure systems.

☐ Duct tightness shall be verified by either of the following:

- Post Construction Test: Leakage to outdoors shall be less than or equal to 4 cfm per 100 square feet of conditioned floor area or total leakage shall be less than or equal to 6 cfm per 100 square feet of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25Pa) across the entire system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test.
- Rough-In Test: Total leakage shall be less than or equal to 6 cfm per 100 square feet of conditioned floor area when tested at a pressure differential of 0.1 inches w.g (25Pa) across the entire system, including the manufacturer's air handler enclosure. All registers shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 3 cfm per 100 square foot of conditioned floor area.
- Testing shall be conducted by an approved third party. A written report of the results shall be signed by the party conducting the test and provided to the code official.
- EXCEPTIONS: The duct leakage test is not required for ducts and air handlers located entirely within the building thermal envelope unless cavities are used for returns.

Building Cavities:

☐ Building framing cavities shall not be used as supply ducts.

☐ Building faming cavities may be used as return ducts if both of the following conditions exist:

- Ducts must be tested for duct leakage in accordance with Section R403.2.2
- Exterior wall cavities shall not be used for return ducts

SIGNATURE_____