

October 19, 2017

Lake O' Springs Village Homeowners Association (LOSVHA),  
Architecture Review Committee (ARC)

## **Lake O' Springs Village- Green Building Requirements**

Canton, Stark County, Ohio

On October 19, 2017, Lake O' Springs Village Homeowners Association (LOSVHA), Architecture Review Committee adopted new standards for green building for Lake O' Springs Village lots 1 through 25.

The new standard requires that every home must be built to be certified as an Energy Star® 3.0 home or of an approved design that is shown to be more energy efficient than Energy Star.

### **ENERGY BUILDING OPTIONS**

I. Energy Star® is a green standard developed by the US Environmental Protection Agency (EPA) in 1992. Lake O' Springs Village has set its goal to build every house at a 55 point or lower score on the HERS rating scale (Home Energy Rating System) as a minimum requirement. Energy Star can help to result in a home that is using 55% or less of the normal energy consumption. Energy Star Homes can add to the cost of construction and requires design and testing costs. An Energy Star® rating will result in a rebate to the builder.

II. Zero Energy Ready™: Zero Energy is a US Department of Energy standard that can reduce electrical energy consumption by 100%. This type of home can cost 30% more than an average home. A Zero Energy Ready home is ready to add solar panels or other systems to be able to sell energy back to utility companies.

III. Leadership in Energy and Environmental Design (LEEDS) is another higher standard for commercial and residential buildings. It is measured in bronze, silver, gold and platinum levels of energy and environmental efficiency. The Zanna Feitler home at 5912 Springlake Road NW in Lake O' Springs Village is built as a LEEDS platinum certified home. Her home includes five geo-thermal wells for both first and second floor heating, solar panels, a south-facing passive solarium, ten-inch insulated walls, and a thousand gallon rain runoff collection system.

IV. Vedic Architecture (Vastu) Builders and homeowners may choose to build specifically with a green building style known as Vastu or Vedic architecture. The Zanna Feitler home at 5912 Springlake Road NW in Lake O' Springs Village is the first certified vastu home build in the development. Such designs will require a contract with the national authority on Vastu homes, Fortune Creating Homes, in Fairfield, Iowa, who will approve designs, inspect, and provide a certification upon completion. Homeowners and builders may also choose to build a vastu home not

designed by and certified by Fortune Creating Homes. Each vastu home will required to be build at least to qualify as a certified Energy Star home as well.

To build to the Energy Star™ 3.0 standard all builders and homeowners will need to meet the following three requirements:

**BEFORE OBTAINING BUILDING PERMIT:**

1. LOSVHA ARC has selected JB’s Home Energy located in Toledo as the preferred agency for approving, inspecting and rating homes to be certified as Energy Star® compliant. Contact owner Josh Bialeki, 5461 Southwyck Boulevard; Toledo, OH 43614 (o) 567-742-4410. [jbshomeenergy@gmail.com](mailto:jbshomeenergy@gmail.com) Our contract with JB’s Energy is performance-driven, and is subject to change. Their Cleveland crew will come to your site to install, inspect, and test.
2. All builders will need to submit construction drawings to JB’s Home Energy for computer modeling for RES Check, making recommended changes necessary to become compliant, and returning finished drawings before builder may apply for their county building permit.

**DURING ENERGY STAR CONSTRUCTION:**

For consistency of standards, LOSVHA has negotiated terms with JB’s Home Energy to provide several of the critical energy services.

1. JB’s Home Energy is required to conduct pre-drywall duct and sill plate sealing inspection after all electric is installed.
2. JB’s Home Energy is required to conduct a blower door test and duct leakage test upon house completion.
3. Builders may choose to have JB’s Home Energy set and seal the sill plates and wrap all ductwork after it is connected to guarantee that the home will meet the energy test requirements.

**MINIMUM INSULATION REQUIREMENTS:**

Crawl Space	R 19 full drape required
Basement Wall Insulation	R 13 full drape required inside or R10 foam board outside to top of foundation or use insulated cement precast equivalent
Rim Band Insulation	R 19 + Energy Sealed
Sill Plates	Must be sealed with foam or Duct-EZ® spray
House Wall Insulation	R 19 on 2x6
Attic/Ceiling Insulation	R 38

**FRAMING:** All Exterior Wall Framing Requires 2x6 inch Studs for heated spaces.

DUCTWORK: Final "Total Duct Leakage" test must provide less than or equal to 12% total leakage.

HOUSE SEAL AND WRAP STANDARD: Blower Door Test- Must be less than 3 air exchanges per hour.

APPLIANCES:

Most electric appliances will need to have an Energy Star™ rating. Appliances to be included are: Furnace (Min AFUE 95), air conditioner (SEER 13), stove, refrigerator, freezer, dish washer, dryer, microwave, hot water tank.

LIGHT BULBS: 100% LED or CFL.

WINDOWS: 0.30 U Factor and SHGC .35 or less

RADON: As normal code requires.

HERS RATER:

For consistency, Certified Raters from sub-contractor JB's Home Energy will be required to be used exclusively to inspect and rate every home. Owners and General Contractors are required to permit the agents of the LOSHA Architectural Review Committee (ARC) and the HERS raters to have unrestricted access to the home for inspections during construction as part of the rating process. Except for the delay of installing drywall, such inspections will not be conducted in a manner that interferes with the building process.

The cost for JB's Home Energy plan submittal and modeling, inspections, blower tests for the house tightness and duct work leakage, and a final certification report has already been negotiated at \$350 per home. JB's Energy partner, Tacoma Energy, LLC, will be considered an additional sub-contractor and will be required to be listed as an additional insured on each Building Contractor's general liability insurance policy. JB's Home Energy will inspect after electrical and duct work is finished and before drywall is started.

ADDITIONAL ASSISTANCE: Owners and General Contractors will also have the opportunity to contract with JB's Home Energy to perform all sealing of sill plates and seal all ductwork with their Duct Ez material. These services would cost an additional 11 cents per house square foot for JB sealing sill plates and wrapping duct joints. These costs would be \$440 for a 2000-square foot home, \$660 for a 3,000 foot home. However, using JB for some services will also allow duct installers to reduce their bid costs. The advantage of employing JB's Home Energy to perform all house sealing is that they would also guarantee that their work will deliver HERS rating of 55 or less, or they will continue to work on the house to obtain that rating.

OTHER LOS VILLAGE REQUIREMENTS:

Read recorded Deed Restrictions.

#### DESIGN AND DRAWING APPROVAL:

House landscape/exterior designs and construction drawings are required to be submitted to the LOSHA, ARC for review and written approval before the start of construction. The Review Committee is primarily concerned about meeting required green standards, house size, exterior colors and materials, and landscaping to minimize blocking lake views of neighbors.

#### VINYL SIDING:

Vinyl siding will be permitted on walls of houses and garages including where is an incidental part of a structure, as when used as part of pre-made window structures, under eaves, and as window or door trim. Plastic lumber will be permitted for floors of decks and porches, and for railings and posts. Brick, stone, Hardie board, and foam-insulated aluminum siding are encouraged for exterior sidings.

#### RUSTICATION:

Every home is required to have a minimum of ten percent of the exterior walls to be covered in natural or faux stone, brick, or stucco. This modest Craftsman theme will be evident on every home. Homes are not required to be designed in a full Craftsman style.

#### SIDEWALKS:

As part of the one-mile community walking/hiking path around Lake O' Springs, every property owner is required to construct a cement sidewalk four feet wide and 4 inches thick extending across the front width of the lot.

Sidewalks are to be placed inside of the edge of the private lot and road right-of-way border within the twenty-foot utility easement. All sidewalks need to be installed within two months of completion of the home or at the start of resident occupancy, if sooner. Sidewalks need to connect exactly in elevation and alignment with already-installed neighboring lot sidewalks.

#### OPEN DITCHES:

For environmental purposes, Lake O' Springs Village is constructed with open ditches instead of curbs and gutters. Ditches have several inches of sand in them below the topsoil to assist in water absorption to reduce and slow down water run-off into the lake.

Ditches need to be maintained and protected. Construction equipment should not attempt to cross ditches except where driveways are planned. Ditches are not permitted to be filled in, except for: 1) driveway culverts, not to exceed twenty feet in width, and not to be located below the level of the nearest catch basin side opening; and 2) fill without driveways, permitted where the driveway can be placed on the highest point of a ditch when it is immediately next to a catch basin.

#### DRIVEWAYS:

Driveways may not be constructed with asphalt. However, the township requires that the driveway apron/flare constructed on the street right-of-way is required to be made of asphalt.

**FENCING:**

Fences are not required except s a part of homes built with Vedic architecture construction. All fence materials and locations will be required to be approved by LOSHA, Architectural Review Committee (ARC).

**EXTERIOR COLOR:**

The exterior color(s) of each house and garage will be subject to approval by the LOSHA, ARC. Future exterior color changes will also require approval.

**TRAIL EASEMENTS:**

A few lots have easements on their property edge for construction of an eight foot trail as part of the community hiking/walking trails being installed throughout the development and around the lake. These easements are required to be kept open and passable and cannot be blocked with any permanent or temporary structures or vegetation.

**FRONT PORCHES:**

Front Porches are required to be a minimum of eight feet wide. This rule is to encourage having a front porch chair or settee. Developer believes that front porches and sidewalks help develop a sense of community.

End of Green Building Requirements

Revised October 19, 2017