

# VA HB2001: SUMMARY & FAQ FOR LOCAL GOVERNMENTS

## A look at the new high performance building law

### KEY TAKEAWAY

Beginning July 1, 2021, localities with population of 100,000 or greater are responsible to incorporate high performance standards into certain projects entering the design phase, including new construction projects over 5,000 square feet and major renovation.

### BACKGROUND

For over a decade, the Commonwealth of Virginia has had a high performance building requirement for state buildings. In the 2021 Virginia General Assembly session, Delegate Helmer introduced revisions to this requirement which also established a similar high performance building provision for local buildings. The bill, HB2001, was amended several times, enacted, and signed into law.

The local government provision is codified as § 15.2-1804.1 and entitled “Building by locality; high performance standards.” Full text of the bill is available [here](#).



*Loudon County Lucketts Fire & Rescue Station, currently under construction and designed for green building certification*

### FAQ

#### What do local governments need to do?

If a locality has a new project that is starting the design phase such as the locality is reviewing the budget for approval, or is preparing a request for proposal for design, or design and construction, services, then the locality needs to include high performance building requirements.

#### Are any localities exempt?

A locality may, by ordinance, adopt its own green design and construction program that includes standards that are more stringent than the requirements of the law. It is expected that a number of Virginia local governments which already have green building programs will evaluate their programs, make any adjustments needed, and pursue an ordinance to continue their own programs. A locality without an existing program is also eligible to establish a new program complying with the law.

### **What projects does this apply to?**

The requirements apply to two types of projects:

- New construction over 5,000 square feet, and
- Renovation where the cost of renovation is more than 50% of the value of the building.

### **What are the requirements?**

The locality must ensure that the building:

1. Is designed, constructed, verified, and operated to comply with a high performance building certification program;
2. Has sufficient zero emission vehicle (ZEV) charging and fueling infrastructure;
3. Has metering of all electricity, gas, water, and other utilities; and
4. Incorporates appropriate resilience and distributed energy features.

### **Is there another option for smaller projects?**

Yes. For a building or renovation less than 20,000 square feet, the locality may choose to achieve ENERGY STAR certification and to conduct building commissioning, instead of the four requirements listed above. ENERGY STAR is an EPA program.

### **What is a high performance building certification program?**

High performance buildings incorporate best practices across multiple sustainability and health categories. Also referred to as green building systems or rating systems, these programs address elements such as energy efficiency, water efficiency, indoor environmental quality, building materials, waste reduction, site sustainability including rainwater, water resources and habitat, and transportation. Several organizations develop and update such systems and provide independent third party certification intended to assure a project has met the requirements and achieved a particular level of green building.

Under the new law, the locality can select one of three options:

- 1) LEED certification,
- 2) Green Globes certification, or
- 3) using the Virginia Energy Conservation and Environmental Standards (“VEES”) established by the Department of General Services, along with an engineer or other professional to provide verification.

### **What is sufficient ZEV charging and fueling?**

The locality determines the needs for charging and fueling associated with the building. The term “sufficient ZEV charging and fueling infrastructure” is defined as:

“the provision of ZEV charging or fueling infrastructure, including EV-ready charging electrical capacity and pre-wiring, either

- (i) sufficient to support every passenger-type vehicle owned by the locality and available for use by the locality that will be located at such building upon full occupancy,
- (ii) meet projected demand for such infrastructure during the first 10 years following building occupancy, or
- (iii) that achieves the current ZEV or EV charging credit for a high performance building certification program.”

On a given project, the intent is for the project team to evaluate projected needs based on the available information about the building's use, select the approach, and determine the needed infrastructure. Note that the locality does not necessarily need to install charging stations, but rather to include critical wiring to support future installations.

### **What are appropriate resilience and distributed energy features?**

The locality should determine what features are appropriate for a particular project. For example, a project team could assess the hazards (such as sea level rise or hurricanes/high wind) and decide to provide features enabling the building to stay at a safe thermal condition to protect occupants in the building. Alternately, based on planned use of a building, the locality may determine no special features are appropriate.

### **What if the project is unique and can't accommodate green features? Is there an exception?**

Many different types of buildings have achieved high performing green building certification, from schools and offices to fire stations and hospitals. However, the law provides the governing body of a locality with the authority to grant an exemption by resolution. To do so, there must be a finding that special circumstances make the construction or renovation to the standards impracticable, and the resolution must be in writing and articulate the basis for the exemption.

### **What if the locality is concerned about cost?**

Studies suggest high performance green buildings may have a first cost (e.g., design and construction) of 0 to 3% more than a conventional code building. Experienced professionals often say it doesn't have to cost more to build green. That may seem counterintuitive but is based on a core aspect of a high performance building project called integrative design. When an integrative process is applied from the beginning, it helps produce better designs with fewer change orders, as well as helping right-size equipment and spaces, factoring in features like daylighting and shading. If there are higher first costs these are typically paid back over time with reduced energy and water costs and potentially reduced maintenance.

There are some additional costs for a high performance green building. First the design team may need to include a green building consultant if the architect or engineering firm does not have this specialty. Second there will be registration and certification fees (for LEED or Green Globes), or alternately, a fee for a third party verification (if using the VEES standard).

If a locality decides to seek an exemption and cost is part of the reason, the locality must compare the cost the locality will incur over the next 20 years or the lifecycle of the project if the locality does not comply with the standards versus the costs to the locality if the locality were to comply.

### **When does the new requirement go into effect?**

July 1, 2021 for localities with population 100,000 or greater. Note that the law will apply to all other localities starting July 1, 2023.



*Virginia Beach Convention Center*