What is an Industrialized Building?

An “Industrialized Building, (IB)” is defined as a combination of one or more sections or modules, subject to state regulations and including the necessary electrical, plumbing, heating, ventilating, and other service systems, manufactured off-site and transported to the point of use for installation or erection, with or without other specified components, to comprise a finished building. Manufactured homes defined in § 36-85.3 of the Code of Virginia and certified under the provisions of the National Manufactured Housing Construction and Safety Standards Act (42 USC § 5401 et seq.) shall not be considered industrialized buildings for the purpose of this law. IBs are often referred to as “Modular Buildings” or “Modular Homes”.

What is the difference between an Industrialized Building and a Manufactured Home?

Simply stated, an IB is built to the same building codes as site built structures, (IRC for one and two-family dwellings and the IBC for all other uses). Manufactured homes are single-family dwellings built to the National Manufactured Home Construction and Safety Standards. IBs are regulated by the Virginia Department of Housing and Community Development (DHCD). Manufactured homes are regulated by the Federal Department of Housing and Urban Development (HUD).

What regulation or standard regulates Industrialized Buildings?

The Virginia Industrialized Building Safety Regulations (IBSR) establishes statewide standards for the construction and installation of IBs and regulates the production of such buildings. The IBSR adopts the same model codes, with the same amendments, as the Virginia Uniform Statewide Building Code (USBC). The IBSR designates the State Building Codes Office (SBCO) as the building official for registered IBs.

How does the SBCO ensure that the building plans and the construction of Industrialized Buildings are code compliant?

The SBCO utilizes private “Compliance Assurance Agencies” (CAAs) to review and approve the building plans and to conduct factory inspections. Agencies applying to become a CAA are evaluated and approved by the SBCO. The SBCO monitors the performance of the CAAs by performing random reviews of CAA approved plans and conducting factory audits and inspections. A list of approved CAAs can be found here.
How do I tell the difference between an Industrialized Building and a Manufactured Home?

All registered IBs must bear Virginia Registered IB seals, CAA certification labels and a data plate, which are generally located under the kitchen sink, in a closet or near the electric panel. The data plate contains information such as the manufacturer’s name and address, serial numbers of the modules, occupancy classification, snow load, wind load, applicable building codes, etc. Manufactured homes have a similar data plate, but will also have a red metal HUD certification label riveted to the siding at or near the end of each section of the home.

Is each modular section of an Industrialized Building required to bear a Virginia Registration Seal?

Yes. Each module of a completed IB is required to have a Registration Seal (Examples: An office building consisting of four modules requires four seals and a single-family dwelling consisting of three modules requires three seals). The seals can be located in each individual module or all seals for a building placed together in one location. (13VAC5-91-260)

What should I do if an Industrialized Building does not have a Virginia Registration Seal?

An IB that does not bear a Virginia Registration Seal is considered an “Unregistered Industrialized Building”. The building official may except an unregistered IB provided the official determines that the IB complies with the IBSR. To confirm compliance, the building official may require submission of full plans and specifications of each building. Concealed parts of the building may be exposed to the extent necessary to permit inspection to determine compliance. The official may also accept reports of inspections and tests from individuals or agencies deemed acceptable to the official. (13VAC5-91-120)

Can an unregistered Industrialized Building be certified for Virginia?

Yes. Section 13VAC-5-91-120 of the IBSR outlines steps to be taken by an approved CAA to register an existing building. When the CAA determines that compliance has been achieved, the CAA will apply the Virginia Registration Seal, the CAA label and the data plate.

Do I have to accept any IB that bears a Virginia Registration Seal?

No. The seal verifies that the IB is code compliant for a specific use and for specific environmental conditions. Example: A classroom has been approved and registered for an educational use only. It has not been registered for an office or business use. An IB registered for a 90 mph wind load should not be accepted in a jurisdiction with a 110 mph wind load. The same applies for ground snow loads and energy/insulation designs.
Do I have to accept a registered Industrialized Building that was built to a previous edition of the building code?

IBs are only required to comply with the construction requirements of the IBSR under which they were constructed and originally registered. However, any components added to the IB such as stairs or ramps would have to comply with the current codes.

Can I approve a change of occupancy classification of an Industrialized Building?

Yes. A building official may issue a certificate of occupancy for a change of use of an IB. Example: Someone wants to use an educational IB as a business. The building official would apply the requirements of section 13VAC-5-91-120 “Unregistered Buildings”. When the use of an IB is changed by a building official, the IB becomes an unregistered IB as it was not registered as a business use. Only the CAA is permitted to recertify an IB which would require a new registration seal, data plate and CAA label.

How do I know the Industrialized Building plans submitted for a permit are approved for Virginia?

Approved designs shall be evidenced by the stamp and date of approval on each design sheet by the CAA. (13VAC5-91-250).

Do I need to review the building plans for an Industrialized Building?

The design review of the IB has been performed by the CAA and is not the responsibility of the local building department. The CAA is responsible for reviewing and approving not only the factory built portions of the IB, but also designs for the handling, installing or erecting of the IB. These include items such as the specifications for the attachment of the modules to each other, completion of raised roof systems, attachment of the modules to the foundation and attachment of components shipped with the IB such as dormers. A recommended foundation system may also be approved by the CAA. However, in areas with special soil conditions such as shrink/swell, the locality may require an engineered foundation system. The locality is also responsible for reviewing and approving site built components such as porches and garages. If a deviation is observed from the CAA approved designs, the SBCO should be notified to ensure that the design is corrected.

Do I need to go inside of the Industrialized Building since it has been inspected and certified as code compliant in the factory?

Section 13VAC5-91-100 of the IBSR requires you to enter the IB to verify that it bears the Virginia Registration Seal, the CAA Certification Label, and data plate. You are also required to inspect for any transportation damage and you must enter the IB to inspect the interconnection of the modules (marriage/mate lines).
What am I responsible for inspecting during the installation of an Industrialized Building?

Footings, foundations, attachment of IB to foundation, completion of siding and roof covering. You are required to inspect the construction work associated with the installation of the building and verify the instructions from the manufacturer for the installation and erection of the building are followed. These instructions include items such as the attachment of the modules to each other, extending plumbing and exhaust vents to the exterior, the interconnection of plumbing, electrical and mechanical work and completion of siding and roofing.

How can I inspect the interconnection of modules when the installer has already covered these areas with drywall and flooring before I get to the job site?

13VAC5-91-270 requires the installer to obtain approval from the building official prior to concealment of installation components.

What can I do if I observe a building code violation caused by the Manufacturer?

When a building is found to be in violation of the IBSR and the violation was caused by the manufacturer, the building official should notify the SBCO who will notify the manufacturer to correct the violation. The building official may require the violations to be corrected before occupancy of the building is permitted.

What if an Industrialized Building is moved from the jurisdiction prior to any corrections being made?

If the building is moved from the jurisdiction before violations have been corrected, the building official shall make a prompt report of the circumstances to the SBCO. The report shall include all of the following: a list of the uncorrected violations; all information contained on the label pertinent to the identification of the building, the manufacturer and the compliance assurance agency; the number of the Virginia registration seal; the new destination of the building, if known; and the party responsible for moving the building.

What USBC provisions are applicable to an Industrialized Building?

In accordance with § 36-99 of the Code of Virginia, all site work associated with the installation or erection of an Industrialized Building is subject to the USBC and administrative provisions of the USBC related to permits, inspections, and certificates of occupancy are also applicable.