



## Ohio Administrative Code Rule 4101:10-4-01 Authorizations.

Effective: April 1, 2025

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(A) Application for authorization. The manufacturer or manufacturer's representative is to submit application for authorization and any submittals necessary in accordance with paragraphs (C) to (C)(7) of this rule to demonstrate compliance with the appropriate provisions of the applicable building codes as described in paragraphs (B) to (B)(3) of this rule. The application for authorization is an online, fillable form provided by the board of building standards at the electronic portal.

(B) Compliance standard. Construction documents are to demonstrate that the design and construction of the units are in compliance with the rules of the board including but not limited to the applicable referenced building codes based on the intended use and occupancy type in which the industrialized unit is intended to be incorporated.

(1) Industrialized unit for non-residential buildings. Industrialized units intended for installation in non-residential buildings shall comply with the applicable provisions of the "Ohio Building Code," "Ohio Mechanical Code," "Ohio Plumbing Code" and other codes and standards referenced in those codes as listed in rule 4101:1-35-01, rule 4101:2-15-01 or rule 4101:15-01 of the Administrative Code.

(2) Industrialized unit for residential buildings. Industrialized units intended to be used exclusively for one-, two-, or three- family dwellings shall comply with the applicable provisions of the "Residential Code of Ohio for One-, Two-, and Three- Family Dwellings" and other codes and standards referenced in that code as listed in rule 4101:8-44-01 of the Administrative Code.

(3) Products, materials and methods of construction used. Any material, product, assembly or method of construction used in the construction of an industrialized unit shall be approved by the board of building standards. The provisions of paragraph (B)(4) of rule 4101:10-1-01 of the Administrative Code describe the product, material and method of construction approval process intended by the board of building standards in accordance with division (C) of section 3781.10 of the Revised Code.



(C) Submittals. With the application for authorization and fee, construction documents are to be submitted to the board of building standards through the board's electronic portal under a registered manufacturer. The construction documents include design drawings and may include, but are not limited to, evaluation service reports, manufacturer's installation instructions, and test reports. The construction documents are to comply with this paragraph and rule 4101:10-5-01 of the Administrative Code:

(1) Information on construction documents. Construction documents are to be provided as electronic media documents. Construction documents are to illustrate or describe all essential elements of the structure or assembly and details of intra- and inter-connections. Construction documents are to be dimensioned, coordinated and of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that the industrialized unit will conform to the provisions of this code. Construction documents, adequate for the scope of the project, is to include information necessary to determine compliance with the applicable referenced building code including but not limited to the building, mechanical, plumbing, fire, electrical, energy, fuel gas codes and where applicable the residential building code.

(a) General information, design criteria and orientation.

(i) Design criteria. Identify the conditions at the site of intended use that are necessary for the installation of the industrialized unit, the applicable codes, referenced standards, climatic and geographic conditions, all occupancy classification(s), type(s) of construction, the overall area of the industrialized unit, the maximum design occupant load, the structural design loads, the seismic design category and site class that control the design. Include specific conditions or design criteria that will prohibit the installation without additional alteration of the industrialized unit at the site of intended use and approval by the local building official including the following as applicable:

(a) Unit type and integration. Identify the type of unit proposed and the intended manner of integration at the site of intended use. Integration is one of the following:

(i) Detached industrialized unit. Where intended to be a stand-alone industrialized unit, identify the industrialized unit as detached and the minimum fire separation distance required.



- (ii) Attached industrialized unit. Where intended to be an attached industrialized unit, identify the industrialized unit as attached and identify the specific conditions required of the building construction to which the industrialized unit can be attached.
- (b) Floodplain unit. Declare the unit as not designed for installation in a flood hazard zone; or, where the unit is intended for installation in a flood hazard zone, identify the flood hazard area for which the unit is designed.
- (c) Seasonal use unit. Where the structure is identified and designed for seasonal use (May to September), compliance with thermal envelope requirements of the energy conservation provisions are not required.
- (d) Hazardous materials. Where the industrialized unit is intended to store, process or otherwise contain hazardous materials, identify the hazardous material, classification type and quantity stored, processed or otherwise used.
- (ii) Scope of work. Each portion of the design represented in the construction documents are to be identified in one of three categories of work:
- (a) Category 1 factory assembled. Work completed at the manufacturing facility under the board's industrialized unit authorization and inspected by the third-party inspection entity. Unless otherwise stated as category 2 or category 3 work, the design represented in the submitted construction documents is category 1.
- (b) Category 2 site assembled. Work completed at the site of intended use regarding modules or panels assembled at the manufacturing plant under the board's industrialized unit authorization. This work is to be inspected by the building department with the authority to enforce the rules of the board in the jurisdiction in accordance with the industrialized unit authorization and section 108 of rule 4101:1-1-01 or section 108 of rule 4101:8-1-01 of the Administrative Code as applicable.
- (c) Category 3 building owner provided. Work completed at the site of intended use necessary to accept the installation of the industrialized unit. This work is under the approval and inspection of



the building department with the authority to enforce the rules of the board in the jurisdiction. The manufacturer is not required to include any technical detail for category 3 scope of work.

(iii) Index. A table of contents identifying the drawings, specifications and other product information included in the construction documents with a method to locate the information within the set of construction documents.

(iv) Orientation. Provide appropriate code appellations of all spaces, identification of the type and location of illustrations, and a legend of notations/symbology used to orient the relationship between illustrations and reference related information that further illustrates or describes the industrialized unit's compliance with the "IU Rules."

(b) Structural integrity and load path. Provide a complete description of the structural system, materials, components and details that complete the load path, of the industrialized unit including the resultant loads that have to be resisted by on-site construction.

(c) Fire-safety. As required under the applicable referenced code, provide fire safety information within the construction documents to address the following:

(i) Means of egress. All modular units are to comply with the means of egress provisions in rule 4101:1-10-01 of the Administrative Code for non-residential buildings and rule 4101:8-3-01 of the Administrative Code for residential buildings. Equipment units need not comply with the means of egress provisions; however, the documents are to indicate the occupancy limit, have posted signage on exterior near point(s) of access and describe the method of access control.

(ii) Fire and smoke protection systems and features. All modular units are to comply with the fire and smoke protection provisions in Chapter 4101:1 for non-residential buildings and Chapter 4101:8 of the Administrative Code for residential buildings. Include identification, description, performance, listing or other compliance indicators for fire protection systems or features as required or provided as part of the industrialized unit including but not limited to:

(a) Minimum fire separation distance from other buildings or structures.



(b) Fire area delineation as well as the type(s), performance and details of the separation assemblies.

(c) Fire-resistance ratings of all structural elements, data substantiating all required fire-resistance ratings including details showing how penetrations will be made for electrical, mechanical, plumbing, and communication conduits, pipes, and systems, and the materials and methods for maintaining the required structural integrity, fire-resistance rating, and firestopping.

(d) Flame spread and smoke developed classifications for interior finish materials.

(e) Draftstops and fireblocking.

(f) Opening protectives.

(g) Fire detection, alarms, and notification systems.

(h) Automatic fire sprinkler systems

(iii) Life safety features. Where the industrialized unit consists of more than two modules in any direction, life safety features are to be specified. The documentation should identify the egress path, fire separation assemblies, smoke barriers, fire and smoke dampers, and all fire protection system devices and signage.

(d) Unit accessibility. The industrialized unit construction documents are to demonstrate compliance with the accessibility requirements of rule 4101:1-11-01 of the Administrative Code.

Exception. If accessibility provisions are not a requirement of the project, a statement is to be provided that declares the unit is for use where accessibility is not required.

(e) Sanitary materials, components and systems. Where an industrialized unit includes potable water, drain, waste and vent system, storm drainage system or other portion of a plumbing system, identify the spaces, finishes, fixtures equipment, appliances and utilities required for sanitary safety including potable water distribution and drain, waste and vent piping.



(f) Environment conditioning and ventilation. Where an industrialized unit includes heating, cooling or ventilation systems, identify the spaces, equipment, appliances, ductwork, fuel, source of power and controls required for environmental conditioning or human comfort.

(g) Miscellaneous systems regulated under the building code. Where other systems regulated under the rules of the board such as boilers, elevators, fuel gas or medical gas is provided, identify the portion of the system provided in the manufacturing plant assembly and indicate that the owner of the building is responsible for completing any on-site inspections with applicable state and/or local regulatory agencies.

(h) Energy conservation. Unless otherwise exempt, demonstrate energy conservation through prescriptive compliance or an energy compliance alternative recognized in the applicable referenced building code. Where energy conservation compliance is demonstrated through a method other than the prescriptive method, provide supporting documentation that illustrates the conditions at the site of intended use that can result in compliant energy conservation.

(i) Connections. Construction documents are to describe all essential elements of the industrialized unit and details of intra-connections and inter-connections including but not limited to:

(i) Structural members to each other and to site built construction;

(ii) Site utilities where a direct connection is provided;

(iii) Building service equipment and piping;

(iv) Electrical wiring systems;

(v) Plumbing and other sanitary systems;

(vi) Mechanical heating, cooling and ventilation systems; and

(vii) any other equipment whether installed at the site or in the manufacturing facility.



(2) Amended construction documents. If substantive changes to the industrialized unit are contemplated after first document submission, or during assembly, those changes must be submitted to the board of building standards for review and authorization prior to those changes being executed.

(3) Alternative materials and methods of construction and equipment. For approval of a device, material or assembly that does not conform to the prescriptive requirements in the applicable referenced building code, the construction documents may demonstrate compliance as an alternative material or method of construction in accordance with section 114.3.2 of rule 4101:1-1-01 of the Administrative Code.

(4) Alternative engineered design. The design, documentation, inspection, testing and approval of an alternative engineered system shall comply with paragraphs (B)(4)(a) to (B)(4)(c) of this rule.

(a) Design criteria. An alternative engineered design is to conform to the intent of the provisions of this code and is to provide an equivalent level of quality, strength, effectiveness, fire resistance, durability and safety. Materials, equipment or components are to be designed and installed in accordance with the manufacturer's installation instructions.

(b) Submittal. The registered design professional is to indicate on the application that the system is an alternative engineered design. The approval and permanent approval records are to indicate that an alternative engineered design was part of the approved installation. Where special conditions exist, the board of building standards is authorized to require additional construction documents to be prepared by a registered design professional.

(c) Technical data. The registered design professional is to submit sufficient technical data to substantiate the proposed alternative engineered design and to prove that the performance meets the intent of this code.

Exception: Approval of alternative materials, products, assemblies and methods of construction in accordance with section 114.3.2 of rule 4101:1-1-01 of the Administrative Code.

(5) Non-required work. Any component, building element, equipment, system or portion thereof not



required by the applicable building code is to be permitted to be installed as a partial or complete system provided that it is constructed or installed in accordance with applicable building code to the extent of the installation.

(6) Evidence of responsibility. Where required construction documents, are submitted for review as required under paragraph (C) of this rule, the design documents are to bear the identification of the person primarily responsible for their preparation.

(a) Seal requirements. Construction documents are to bear the seal of a registered design professional pursuant to section 3791.04 of the Revised Code.

(i) Exceptions: The seal of a registered design professional is not required on construction documents for:

(a) Buildings or structures classified as one-, two-, or three-family dwellings and accessory structures;

(b) Energy conservation design for buildings or structures classified as one-, two-, or three-family dwellings;

(c) Fire protection system designs submitted under the signature of an individual certified in accordance with section 107.4.4 of rule 4101:1-1-01 of the Administrative Code;

(d) Industrialized units subject to sections 3781.06 to 3781.18 and 3791.04 of the Revised Code where the board of building standards determines that the proposed work does not involve the technical design analysis of work affecting public health or general safety in the following areas: means of egress, structural, mechanical, electrical, plumbing, or fire protection.

(b) Sealed construction documents. Construction documents which have been prepared by an Ohio registered design professional who prepared the same as conforming to the requirements of the rules of the board pertaining to design loads, stresses, strength, and stability, or other requirements involving technical analysis, need be examined only to the extent necessary to determine conformity of such construction documents with other requirements of the rules of the board.





(c) Technical design analysis. For the purpose of paragraph (C)(6) of this rule, technical design analysis is defined as the development of integrated solutions using analytical methods in accordance with established scientific and engineering principles.

(D) Authorization process. When construction documents have been submitted to the board of building standards for review and authorization as an industrialized unit, the board shall cause the construction documents to be examined for compliance with the rules of the board to the extent of the scope of the industrialized unit. The examiner is to first determine whether the construction documents being reviewed are adequate as required in paragraph (A) of this rule. If so, the examiner is to review the construction documents to determine compliance with the rules of the board.

(1) Limits of examination.

(a) The board of building standards' review of the construction documents submitted is based on the scope of work shown or described.

(b) The design criteria identified in the construction documents are to be relevant to locations in Ohio and establish controls over the site of intended use where the industrialized unit may be installed. Design criteria may exceed conditions in Ohio per paragraph (B)(5) of rule 4101:10-3-01 of the Administrative Code.

(c) Authorization is not required for the following work; however, this work is to comply with all applicable provisions of the rules of the board:

(i) Building:

(a) One-story, detached, structures used as group S-2 storage or group U structure and similar uses provided no building services are installed and the floor area does not exceed one hundred twenty square feet (11.15 m<sup>2</sup>).

(b) Water tanks supported directly upon grade if the capacity does not exceed five thousand gallons (18,927 L) and the ratio of height to diameter or width does not exceed two to one.



(c) Finishes, cabinetry, decorative elements not regulated by the rules of the board.

(d) Above-ground storage tanks as defined in rule 4101:1-2-01 of the Administrative Code and the associated tank foundations.

(ii) Electrical:

(a) Electrical equipment used for radio and television transmissions except equipment and wiring for power supply, and the installations of towers and antennas.

(b) The installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

(c) Electrical wiring, devices, appliances, apparatus or equipment operating at less than twenty-five volts and not capable of supplying more than fifty watts of energy, unless specifically addressed in this code.

(d) Process equipment and the associated wiring on the load side of the power disconnect to the equipment.

(iii) Gas:

(a) Appliances and equipment used for heating, cooling or ventilation, exclusively or in combination, and where the appliance or equipment is portable in nature.

(b) Process equipment, including the associated tanks, foundations, and process piping.

(c) For combination building services and process piping systems, the process piping located on the process equipment side of the control valve which separates the process from the building services piping is exempt from approval.

(iv) Mechanical:



(a) Appliances and equipment used exclusively or in combination for heating, cooling or ventilation and where the appliance or equipment is portable in nature.

(b) Process equipment including the associated tanks, foundations, and process piping. For combination building services/process or power piping systems, the power or process piping located downstream of the control valve which separates the process from the building services piping is exempt from approval.

(v) Plumbing:

(a) Process equipment including the associated tanks, foundations, and process piping.

(b) For combination building services and process piping systems, the process piping located on the process equipment side of the control valve which separates the process from the building services piping is exempt from approval.

(2) Plan review, compliance with rules of the board. If the construction documents are determined to comply with the rules of the board, the examiner is to communicate the findings and recommend the conditions and type of authorization to the board's designee.

(a) Board's authorization. The board's designee is to evaluate the examiner's recommendations; and when the construction documents have been determined to conform to the applicable provisions of the rules of the board, the board's designee is to provide any additional limitation and stamp such plans with the board's industrialized unit seal as the authorization in accordance with paragraph (B) of rule 4101:10-3-01 of the Administrative Code.

(b) Locked authorization. The board is to lock the authorized construction documents and save the documents under the registered manufacturer's account in the board's industrialized unit database. The authorized construction documents are available for download through the registered manufacturer's electronic portal.

(c) Posting. The authorized construction documents are to be available at manufacturer's facility



during the manufacturing process of the industrialized unit. The manufacturer is to provide access to and use of the authorized construction documents by the third-party inspection entity for the required inspections during manufacture.

(3) Plan review, items of noncompliance.

(a) Corrections letter. The plans examiner for the board of building standards is to communicate items of non-compliance as a corrections letter via the electronic portal until such time as an authorization can be issued. From the items on the correction letter, an adjudication order can be either requested by the manufacturer or deemed necessary by the board.

(b) Adjudications orders. When issued, every adjudication order is to contain the following information:

(i) Clearly identify the rules of the board violated;

(ii) Specifically indicate which detail, installation, site preparation, material, appliance, device, addition, alteration to structures, construction documents, assemblages or procedures are necessary to change to comply with the order;

(iii) Include notice of the procedure for appeal and right to a hearing if requested within thirty days of the mailing of the order. The order is to also indicate that, at the hearing, the manufacturer may be represented by counsel, present arguments or contentions orally or in writing, and present evidence and examine witnesses appearing for or against the manufacturer;

(iv) Specify a reasonable period of time in which to bring the item(s) on the order into compliance;

(v) The order is to be sent to the manufacturer and manufacturer's representatives.

(4) Time limitation of plan review. The board of building standards will review submittals and issue an authorization, a correction letter or an adjudication order in accordance with these rules within thirty days of the date of application.



(5) Order of plan review. Construction documents submitted for authorization is to be examined for compliance with the rules of the board in the order received, except unless otherwise consented to by the manufacturers affected by deferred examination, or pursuant to an alternative schedule implemented by the board's designee providing for order of plan review based on project size or other rational basis. No alternative schedule may give preferential treatment to any one individual, organization or industry.

(6) Inadequate construction documents. If construction documents are determined to be incomplete or inadequate for examination, the examiner is to report the findings to the applicant pursuant to paragraph (D)(3) of this rule. The examiner is to examine the construction documents to the extent possible and identify what information from this rule and rule 4101:10-5-01 of the Administrative Code is missing and needed to complete the required examination.

(7) Resubmitted documents. If construction documents are resubmitted in response to an adjudication order or correction letter, the review for compliance is limited to determining that the item(s) of non-compliance, and any work affected, has been corrected.

(8) Authorized construction document sets. Construction documents are kept on the board's industrialized unit database and are available for download through the electronic portal by the manufacturer or with the manufacturer's permission. The board is to maintain the construction documents in accordance with its records retention schedule.

(9) Abandoned applications. Applications will be considered abandoned if the manufacturer fails to respond to a correction letter or other written communication from the board requesting information within six months from the date of the letter or communication. Abandoned applications are no longer valid and any fees accrued for plan review are the responsibility of the manufacturer and are due upon receipt of notice of the abandoned application.

(E) Required inspections. Unless otherwise permitted under paragraph (C)(2) of rule 4101:10-3-01 of the Administrative Code, the authorization is to include a list of required inspections as determined by the board from the following list:

(1) Plant evaluation. In-plant evaluation in accordance with paragraphs (A)(5) to (A)(6)(e) of rule



4101:10-3-01 of the Administrative Code that affirms the current plant evaluation is sufficient for manufacture of the authorized industrialized unit and the compliance assurance program is available during the manufacturing process.

(2) Rough framing. Floor, floor/ceiling, wall, roof/ceiling, diaphragms, over framing, and other structural system components as included in the industrialized unit authorization.

(3) Rough building services. HVAC, plumbing, electrical, fuel gas, fire protection, medical gas, and other building service systems components as included in the industrialized unit authorization.

(4) Weather resistance. Roof covering, siding, water resistive barrier, flashing, ice barrier, vapor retarder, exterior windows and doors, thermal envelop and other materials used to protect the structure from water, moisture, vapor intrusion and energy conservation as included in the industrialized unit authorization.

(a) Exception. Industrialized units that are intended for installation inside another structure which provides the required weather resistance.

(b) Thermal envelope. The thermal envelop includes but is not limited to insulation, air barrier, air leakage, duct leakage, leakage testing, and other materials as included in the industrialized unit authorization.

(c) Leakage in multi-module industrialized units. For industrialized units that are assemblies of multiple modules at the site of intended use, the air leakage testing and duct leakage testing, where required, is to be completed at the site of intended use.

(5) Insignia of a subassembly. Where an industrialized unit is assembled utilizing industrialized unit subassemblies, the inspection agency is to verify that the subassembly is a valid industrialized unit.

(6) Testing and reports. Verification that required testing has been completed, records are maintained including testing results and correction of unsatisfactory results. Testing is complete when required testing demonstrates the construction is satisfactory as tested.



(7) Final. A final inspection is of materials, components and construction that is readily visible after construction of the industrialized unit is complete including, but not limited to, finish materials, doors, glazing, cabinetry, millwork, hardware, fixtures, appliances, equipment, luminaires, devices, alarms, sensors, cover plates, etc. as included in industrialized unit.

(8) On-site inspections. A list of inspections conducted at the site of intended use by the department with the authority to enforce the rules of the board in the jurisdiction including but not limited to intra-connections of modules or panels for structural system, building services, thermal envelope and finishes as well as inter-connections to site built construction and/or utilities as applicable.