

G102-21

IBC: SECTION 202 (New), SECTION 429 (New), 429.1 (New), 429.2 (New), 429.3 (New), ICC Chapter 35 (New)

Proponents: Tom Hardiman, representing Modular Building Institute (tom@modular.org)

2021 International Building Code

Add new definition as follows:

OFF-SITE CONSTRUCTION. A modular building, modular component, panelized system or tiny house which is designed and constructed in compliance with Section 429 of this code and is wholly or in substantial part fabricated or assembled in manufacturing plants for installation - or assembly and installation - on a separate building site and has been manufactured in such a manner that all parts or processes cannot be inspected at the installation site without disassembly, damage to, or destruction thereof.

Add new text as follows:

SECTION 429 **OFF-SITE CONSTRUCTION**

429.1 General. This section applies to off-site construction and shall govern the requirements for planning, design, fabrication, assembly, inspection and regulatory compliance.

429.2 Construction. In addition to other applicable requirements in this code, off-site construction shall be constructed in accordance with ICC 1200.

429.3 Regulatory Compliance. In addition to other applicable requirements in this code, off-site construction shall be inspected and regulated in accordance with ICC 1205.

Add new standard(s) as follows:

ICC

International Code Council, Inc.
500 New Jersey Ave NW 6th Floor
Washington, DC 20001

ICC 1200-2021

Standard for Off-Site Construction: Planning, Design, Fabrication and Assembly

ICC 1205-2021

Standard for Off-Site Construction: Inspection and Regulatory Compliance

Reason: Interest in off-site construction including modular and panelized systems and tiny houses is growing. Off-site construction has been identified as a solution for multiple societal and industry challenges including affordability, sustainability, job site safety, and the availability of skilled workers. However, many segments of the building industry including code officials, building owners, designers and contractors are often unfamiliar with these processes. While all off-site construction projects (with the exception of manufactured housing covered under the U.S. Department of Housing and Urban Development's Manufactured Home Construction and Safety Standards) must meet the requirements of the code in place at the final project site, the translation between code requirements and the off-site construction process is not always clear. To facilitate enhanced understanding of the off-site construction process, assure off-site projects maintain the requirements in code and are implemented in an efficient manner for both AHJs and manufacturers, the International Code Council (ICC) and the Modular Building Institute (MBI) initiated a joint project to write standards for the planning, design, fabrication, assembly, inspection and regulatory compliance of off-site and modular construction in February 2019.

A standard development committee was created by the ICC Board of Directors in July 2019, and the first meeting of that committee was in October of 2019. The scope of standard ICC 1200 is to provide minimum requirements to safeguard the public health, safety, general welfare and address societal and industry challenges in multiple facets of the off-site construction process including: planning, designing, fabricating, transporting and assembling commercial and residential building elements. The scope of standard ICC 1205 is to provide minimum requirements for the inspection and regulatory compliance of off-site construction.

Off-site (or modular) construction entails the planning, design, fabrication and assembly of building elements at a location other than the location where they were fabricated. Large components of a structure can be assembled in a factory-like setting and transported to the building site for final assembly. Subsequently, the finished construction is required to comply with the model building code adopted by the local authority having jurisdiction. These standards provide planning and preparation requirements such as: the role of the architect/modular manufacturer/construction manager/general contractor, location of plant vs construction site, engagement early on in the process, material procurement and lead times, and change orders. These standards also provide for requirements for a controlled manufacturing environment, supply chain integration, structural modular vs non-structural modular (e.g. bathroom pods), the fabrication process and on-site assembly such as: staging area for construction materials, foundation, placing modules, structural connections, utilities (PMG), weather considerations, finishing mate lines, inspection, approval and regulatory compliance of off-site residential and commercial construction components and their assembly and completion at the final building site such as: permitting; in-plant and on-site final inspections; third party inspections; the role of Industrialized Building Departments, state modular

programs and the Authority Having Jurisdiction.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This proposal outlines off-site construction methods that may be unfamiliar to inexperienced industry participants and offers a model regulatory process to address state and local needs.

Staff Analysis: A review of the standard proposed for inclusion in the code, ICC 1200-2021 and ICC 1205-2021, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before March 20, 2021.