

BBRS

Official Interpretation No. 2012_4

Date: September 11, 2012

Subject: On applicable building code edition for repair or renovation of modular (manufactured) buildings.

Background/Discussion:

Modular buildings (“manufactured buildings” per 780 CMR, 8th Edition, Chapter 110.R3, inclusive) are manufactured buildings containing concealed elements, such as electrical, mechanical, plumbing, etc. and which are manufactured...in manufacturing facilities, on or off of the intended final building site (refer to the 8th Edition of 780 CMR, Section 110.R3.1.2, “DEFINITIONS”, for the complete definition of “manufactured buildings”).

Although such manufactured building design, construction and erection is closely controlled by requirements of 780 CMR, it is still possible that a manufactured building can arrive at the intended property site exhibiting some building system (structural, weatherization, energy conservation, fire protection, etc.)¹ non compliance w/the Edition of 780 CMR to which the building was designed and constructed, thus necessitating on-site repair of said manufactured building system.

Independent of the manufactured building process, the foundation upon which the manufactured building is placed and any exterior stair systems or decks leading to and from the manufactured building are site built and not subject to the manufactured building regulations save for the fact that for one and two-family buildings a licensed Construction Supervisor is required involved.

QUESTION 1: If a manufactured building arrives at the final building site and Building Code¹ non compliances are discovered in some manufactured building system, to what Edition of 780 CMR, should repairs be made to that manufactured building system?

ANSWER 1: Under the described conditions, the Building Code repairs to the subject manufactured building should be in accordance with the Edition of 780 CMR that was in force at the time of design and construction of said building.

QUESTION 2: A manufactured building, designed and constructed under a much earlier Edition of 780 CMR is found, many years after setting and occupancy, to have failure of a portion of a manufactured building system¹. To what Edition of 780 CMR should the building system be repaired?

ANSWER 2: A manufactured building is often, in part, an engineered design (i.e. possesses a truss roof) and such a building, that may be, say 30 years old, would have been designed to a very early Edition of 780 CMR. In the interim, 780 CMR may have been updated for wind or seismic or snow loads, etc. Under such circumstances, engineering consideration should be given to ascertain if the system failure¹ was due to real time loading or whether the failure might simply have been age-related before determination of what Edition of 780 CMR should be imposed in that building's repair. Repair w/like-kind materials and structural component sizes would be reasonable (earlier Edition of 780 CMR) if it is determined that current real time loading was not the cause of the failure. On the other hand if real time loading conditions are determined to have caused the failure then consideration of repair utilizing the current Edition of 780 CMR may be more appropriate.

QUESTION 3: A building site is to receive a manufactured building and a foundation and exterior stair and/or deck system or an on-site gable roof system is to be constructed. To what Edition of 780 CMR should a foundation system or exterior stair or deck system or on-site, roof dormer system be designed and constructed?

ANSWER 3: Because the foundation system, exterior stair and/or deck system and field modification of the building roof system are not under the manufacturing control of the Manufactured Building company, whatever is the current Edition of 780 CMR should govern the proposed design and construction of foundations and exterior stair and/or deck systems and on-site, roof dormer systems.

¹ building systems explicitly regulated by 780 CMR are the systems discussed in this Official Interpretation. For Specialized Code non conformances (electrical, plumbing, gas, etc..) one would need to reach out to the appropriate Regulating Board having jurisdiction to ascertain what Edition of Specialized Codes would be required in any repair or proposed new construction.