

**NEW HAMPSHIRE STATE BUILDING CODE
PROPOSED AMENDMENT FORM**

Proposed amendment submitted by:

ME-15-12-17

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Date: March 6, 2017

Company /Organization: State Building Code Review Board

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Applicable code: 2015 IMC (adoption pending) Applicable code section: 301.19

Select only one code: *IEBC-15 IBC-15 IRC-15 IPC-15 IMC-15 IECC-15 IEBC-15 NEC-14 (NFPA 70)*

The 2015 IMC is void of language relative to HVAC systems Testing & Balancing. As Testing & Balancing procedures are normally defined under project specifications Division 23 – HVAC, the recommendation is made to add a new section to the 2015 IMC entitled **Section 301.19 HVAC Systems Testing & Balancing.**

Check one: Delete without substitution: Add new section to read as follows:
 Delete section and substitute the following: Revise section to read as follows:
 ~~Show Line through material to be deleted.~~ Underline material to be added.

Proposed new Section:

301.19 HVAC Systems Testing & Balancing. HVAC systems shall be balanced in accordance with generally accepted engineering standards. Air and water flow rates shall be measured and adjusted to deliver final flow rates within the tolerances provided in the product specifications. Test and balance activities shall include air system and hydronic system balancing.

301.19.1 Air systems balancing. Each supply air outlet and *zone* terminal device shall be equipped with means for air balancing in accordance with the requirements of Chapter 6 of the *International Mechanical Code*. Discharge dampers used for air-system balancing are prohibited on constant-volume fans and variable-volume fans with motors 10 hp (18.6kW) and larger. Air systems shall be balanced in a manner to first minimize throttling losses then, for fans with system power of greater than 1 hp (.746 kW), fan speed shall be adjusted to meet design flow conditions.

Exception: Fans with fan motors of 1 hp (.746 kW) or less are not required to be provided with a means for air balancing.

301.19.2 Hydronic systems balancing. Individual hydronic heating and cooling coils shall be equipped with means for balancing and measuring flow. Hydronic systems shall be proportionately balanced in a manner to first minimize throttling losses, then the pump impeller shall be trimmed or pump speed shall be adjusted to meet design flow conditions. Each hydronic system shall have either the capability to measure pressure across pump, or test ports at each side of each pump.

Exceptions: The following equipment is not required to be equipped with a means for balancing or measuring flow:

1. Pumps with pump motors 5 hp (3.7 kW) or less.
2. Where throttling results in no greater than 5 percent of the nameplate horsepower draw above that required if the impeller were trimmed.

301.19.3 System balancing report. A written report describing the activities and measurement completed in accordance with generally accepted engineering standards and Testing & Balancing industry standards.

Reason/Justification: To identify and capture HVAC Systems Testing & Balancing requirements in the 2015 IMC.

Financial Analysis/Fiscal Impact of proposed amendment: None

For Building Code Review Board Use:

Not approved: _____ Approved: Approved with modifications: _____

Scheduled Hearing Date: _____ Exhibit #: _____

Chair's Signature: Shawn G. Bergen Sr Date: 14 April 2017

Printed Name: Shawn G. Bergen Sr