November 7, 2018

Bureau of Construction Codes
Attn: Shannon Matsumoto
611 W. Ottawa
Lansing, MI 48933

Dear Construction Code Commission,

On behalf of the Michigan Air Conditioning Contractors Association, please find our suggested changes, in bold and underlined, to the proposed 2018 Michigan Mechanical Code rules.

301.2 Energy utilization. Heating, ventilating and air-conditioning systems of all structures shall be designed and installed for efficient utilization of energy in accordance with the International Energy Conservation Code.

Exception: Any code provision or part of the system that does not meet the definition of “cost-effective” per MCL 125.1502a(p) and MCL 125.1504(3)(f) - (g) as determined by the mechanical inspector.

603.9 Joints, seams and connections. Longitudinal and transverse joints, seams and connections in metallic and nonmetallic ducts shall be constructed as specified in SMACNA HVAC Duct Construction Standards—Metal and Flexible and NAIMA Fibrous Glass Duct Construction Standards. Joints, longitudinal and transverse seams and connections in ductwork shall be securely fastened and with welds, gaskets, mastics (adhesives), mastic-plus-embedded-fabric systems, liquid sealants or tapes. Tapes and mastics used to seal fibrous glass ductwork shall be listed and labeled in accordance with UL 181A and shall be marked “181 A-P” for pressure-sensitive tape, “181 A-M” for mastic or “181 A-H” for heat-sensitive tape. Tapes and mastics used to seal metallic and flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked “181 B-FX” for pressure-sensitive tape or “181 B-M” for mastic. Duct connections to flanges of air distribution system equipment shall be sealed and mechanically fastened. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked “181 B-C.” Closure systems used to seal all ductwork shall be installed in accordance with the manufacturer’s instructions.
Exception: For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams and locking-type joints and seams. This exception shall not apply to snap-lock and button-lock type joints and seams located outside of conditioned spaces.

Exception: For ducts having a static pressure classification of less than 2 inches of water column (500 Pa) and located inside of the condition space, additional sealing shall not be required.

REASONS

Reason for 301.2: Because the Bureau of Construction Codes is not promulgating the Energy Code at the same time and the Mechanical Code, which is broadly referencing the Energy Code, the suggested exemption language is needed for clarification that even referenced code provisions, that are enforceable, must still be "cost effective" as statutorily required. Additionally it must be made clear that mechanical inspectors that work in jurisdictions that have elected pursuant to MCL 125.1508b to administer and enforce the Stille-DeRossett-Hale Single State Construction Code Act, 1972 PA 230 and state code have the authority and responsibility to determine what is "cost effective". This exemption is consistent with the Bureau of Construction Codes published 2015 Michigan Residential Code Errors and Conflict document.

Reason for 603.9: The 2018 International Mechanical Code has already established that for ducts having a static pressure classification of less than 2 inches of water column that are located in the conditioned space does not need additional closure systems on continuously welded joints and seams and locking-type joints and seams. However requiring ducts with other types of joints and seams to be sealed that are constructed in accordance with the mechanical code and located in a conditioned space will not see enough of an energy savings to meet the definition of "cost effective" and therefore not statutorily allowed. This exemption is consistent with the Bureau of Construction Codes published 2015 Michigan Residential Code Errors and Conflict document. Additionally to further support this exemption see attached mechanical resolution dated September 7, 2018 that was prepared by a mechanical engineer.

Thank you for your consideration.

Best Regards,