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## ARE THERE ASTM STANDARDS FOR MANUFACTURED STONE VENEER?

Yes. ASTM C1670/C1670M, *Standard Specification for Adhered Manufactured Stone Masonry Veneer Units*, addresses the minimum requirements for manufactured stone veneer units and ASTM C1780, *Standard Practice for Installation Methods for Adhered Manufactured Stone Masonry Veneer*, covers requirements for the installation of adhered manufactured stone veneer systems.

**ASTM C1670/C1670M** covers the minimum product requirements for the units used in adhered manufactured stone masonry veneer systems. This standard covers acceptable materials, physical requirements, dimensional allowances, and finish and appearance requirements for the units. Table 1 shows a short summary of the physical requirements for manufactured stone veneer units.

**Table 1—Summary of ASTM C1670/C1670M-16 Physical Requirements**

Property	Test Method	Requirement
Compressive Strength – concrete mix tested	ASTM C39/C39M (cylinders)	2,100 psi (15 MPa)
Freeze-Thaw – concrete mix tested	ASTM C666/C666M Procedure A (modified to be percent mass loss)	1.5% mass loss maximum for each of five tested specimens
Linear Drying Shrinkage – concrete mix tested	ASTM C157/C157M	0.10% maximum
Shear Bond – units tested	ASTM C482	50 psi (350 kPa) minimum
Weight per Square Foot – units tested	ASTM C140/C140M (modified calculations)	15 lb/ft <sup>2</sup> maximum

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Additionally, the units shall have an average thickness of no more than 2.625 inches (67 mm), with no face dimension greater than 36 inches (915 mm). The total face area of any unit shall not exceed 5 ft<sup>2</sup> (0.5 m<sup>2</sup>).

**ASTM C1780** covers standard installation practices for adhered manufactured stone masonry veneer systems. This includes requirements for materials used, acceptable job conditions, and recommended installation practices over several different substrates.

The materials section of the Practice includes units, lath, acceptable mortars, mortar admixtures and pigments, lath fasteners, weep screeds, and related flashing materials. For job conditions, the Practice provides information on how to handle hot and cold weather construction requirements. The substrates covered in the Practice include:

- Masonry
- Wood/Metal Framing
- Sheathed Frame Substrate
- Existing Cured Stucco (as a replacement for scratch coat)
- Cast-in-Place Concrete or Precast Concrete Tilt-up Walls

For each of these substrates, surface condition, water resistive barrier installation, lath installation, scratch coat, and stone installation are covered.

Additional information on the installation of manufactured stone veneer systems is also available in the [\*Installation Guide and Detailing Options for Compliance with ASTM C1780 for Adhered Manufactured Stone Veneer\*](#).

Both ASTM standards are available through ASTM at [www.astm.org](http://www.astm.org).

## ABOUT CMHA

The Concrete Masonry & Hardscapes Association (CMHA) represents a unification of the Interlocking Concrete Pavement Institute (ICPI) and National Concrete Masonry Association (NCMA). CMHA is a trade association representing US and Canadian producers and suppliers in the concrete masonry and hardscape industry, as well as contractors of interlocking concrete pavement and segmental retaining walls. CMHA is the authority for segmental concrete products and systems, which are the best value and preferred choice for resilient pavement, structures, and living spaces. CMHA is dedicated to the advancement of these building systems through research, promotion, education, and the development of manufacturing guides, design codes and resources, testing standards, and construction practices.

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