



04 DIVISION  
MORTAR

## ADHERED VENEER MORTARS PRODUCT SELECTION GUIDE





Selecting the best mortar for the application is critical for getting optimal performance from your masonry adhered veneer system.

## SPEC MIX PROVIDES PRODUCT PERFORMANCE SOLUTIONS FOR YOUR MASONRY ADHERED VENEER SYSTEM

When the specification calls for thin veneer masonry installed on the exterior or interior of the building, the SPEC MIX® line of Adhered Veneer Masonry Mortars is the solution. From scratch coat to bond coat to jointing mortars— project owners, designers and contractors can choose from our standard **ADHERED VENEER MORTAR**, or upgrade to **POLYMER MODIFIED ADHERED VENEER MORTAR**, or our ultimate thin veneer adhesive, **THIN VENEER ADHESION MORTAR XP500**.

Regardless of the application, SPEC MIX product formulations are designed with the installer in mind. Meeting specifications and standards is a necessity— at SPEC MIX delivering a mason friendly mix for easy installation, higher productivity and maximum profitability is our promise! Choosing from our line of adhered veneer products locks in quality assurance and performance.



COLORED AVM USED IN JOINT GROUT APPLICATION

### ADHERED VENEER MASONRY MORTAR SELECTION CHART

PRODUCTS	ADHERED VENEER MORTAR	POLYMER MODIFIED ADHERED VENEER MORTAR	THIN VENEER ADHESION MORTAR XP500
<b>SUBSTRATE</b>			
Lath over stud (wood/metal)	●	●	●
Concrete masonry unit		●	●
Properly prepared concrete		●	●
Cement board			●
<b>APPLICATION</b>			
3/8" +/- Scratch coat over lath	●	●	
3/8" +/- Bond coat over scratch coat	●	●	
1/8" - 1/4" Bond coat			●
Joint grout	●	●	
<b>THIN MASONRY UNIT TYPE (BONDING MATERIAL)</b>			
Lightweight manufactured concrete	●	●	●
Thin cut natural stone		●	●
Thin brick		●	●





AVM USED WITH MANUFACTURED STONE FOR BOND COAT APPLICATION

## ADHERED VENEER MORTAR (AVM)

### THE VERSATILE, DURABLE THIN VENEER MORTAR.

**SPEC MIX Adhered Veneer Mortar (AVM)** is a specially formulated mortar for bonding lightweight manufactured thin veneer masonry units over wood frame and steel stud construction. It contains an optimal blend of dry cementitious materials, masonry sand, and performance enhancing admixtures specifically designed for use as a scratch coat, bond coat and joint grout for thin veneer masonry units. It is formulated as a cohesive material with consistent workability, anti-sag formulation, high water retention and excellent bond strength. The final wall system will produce a non-load bearing, aesthetically pleasing exterior veneer or interior finish ideal for residential construction.

SPEC MIX AVM is designed to be compatible with the characteristics of most masonry thin veneer units. Packaged in 80 (36.2 kg) and 3,000 lb (1,360.7 kg) bags, AVM is available in SPEC MIX standard colors and custom colors for joint grouting the masonry veneer system.

SPEC MIX AVM meets ASTM C 270, CSA A179, ASTM C 1714, and TMS 402/602 applicable requirements. Project submittals are available upon request; data sheet, SDS and standard color options are available at [www.specmix.com](http://www.specmix.com).

### ADHERED VENEER MORTAR PERFORMANCE STANDARDS

BOND STRENGTH	TMS 402/602 Requirement	SPEC MIX ADHERED VENEER MORTAR (Typical Results)
	At 28 Days (ASTM C 482)	50 PSI (0.3 MPa)
		>100 PSI (0.7 MPa)





PMAMV APPLIED TO NATURAL THIN STONE FOR BOND COAT APPLICATION TO CONCRETE

## POLYMER MODIFIED ADHERED VENEER MORTAR (PMAMV)

### THE LOW SAG, HIGH PRODUCTIVITY & BOND MORTAR.

**SPEC MIX Polymer Modified Adhered Veneer Mortar (PMAMV)** is a technologically advanced adhered veneer mortar for use in bonding manufactured stone veneer, natural thin cut stone and thin brick to cementitious substrates. PMAMV is formulated to provide excellent workability, water resistance, efflorescence mitigation, durability and high bond strength. SPEC MIX PMAMV is the ideal solution for owners, architects and contractors that demand a low-sag mortar with great working time that speeds up installation and productivity. The anti-slip properties of PMAMV make the installation of large natural thin cut stone easy while holding units in place for an extended time.

### POLYMER MODIFIED ADHERED VENEER MORTAR PERFORMANCE STANDARDS

BOND STRENGTH	TMS 402/602 Requirement	SPEC MIX POLYMER MODIFIED ADHERED VENEER MORTAR (Typical Results)
	At 28 Days (ASTM C 482)	50 PSI (0.3 MPa) >300 PSI (2.1 MPa)

# THIN VENEER ADHESION MORTAR XP500

## THE MIX WITH EXTREME BOARDLIFE AND BOND

**SPEC MIX Thin Veneer Adhesion Mortar XP500** is a premium preblended polymer modified thin set mortar specifically designed to bond masonry thin veneer units including manufactured and gauged or ungauged natural thin stone and thin brick to substrates for interior and exterior installations. Its innovative, anti-sag formulation and optimized sand gradation provide superior workability, adhesion and durability crucial to the application.

## APPLICATION & SUBSTRATES

- Interior and exterior thin veneer installations
- Hardened scratch coats
- Concrete (properly prepared and free of curing compounds)
- Concrete masonry units
- Cement backer boards
- Interior gypsum wallboard with or without primer (consult with primer manufacturer for suitability)



XP500 ADHESION MORTAR WITH NATURAL THIN STONE FOR BOND COAT APPLICATION

SPEC MIX XP500 should not be used in a scratch coat over lath or a joint grout application. XP500 comes packaged in 50 lb (22.6 kg) bags. It exceeds ANSI A118.4 and ANSI A118.15 applicable requirements as well as TMS 402/602 Building Code Requirements and Specification for Masonry Structures shear strength requirements when tested in accordance with ASTM C 482. Project submittals are available upon request; data sheet and SDS is available at [www.specmix.com](http://www.specmix.com).

## XP500 PERFORMANCE STANDARDS

SPEC MIX THIN VENEER ADHESION MORTAR XP500 WAS PUT TO THE TEST TO CONFIRM IT IS COMPLIANT WITH THE FOLLOWING PERFORMANCE STANDARDS:

- AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) ANSI A118.4 AND A118.15
- ASTM C 482 STANDARD TEST METHOD FOR BOND STRENGTH OF CERAMIC TILE TO PORTLAND CEMENT PASTE
- TMS 402/602 BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES
- TILE COUNCIL OF NORTH AMERICA (TCNA) TCNA HANDBOOK FOR CERAMIC TILE INSTALLATION

## XP500 ENGINEERING DATA (LABORATORY PREPARED)

	ANSI A118.15 REQUIREMENTS	SPEC MIX XP500 (TYPICAL RESULTS)
<b>PORCELAIN MOSAIC TILE SHEAR STRENGTH, PSI</b>		
AT 1 DAY	100 PSI (0.7 MPa)	>200 PSI (1.3 MPa)
AT 7 DAYS	300 PSI (2.0 MPa)	>600 PSI (4.1 MPa)
AT 7 DAYS DRY / 7 DAYS WATER IMMERSION	200 PSI (1.3 MPa)	>300 PSI (2.0 MPa)
AT 28 DAYS	400 PSI (2.7 MPa)	>700 PSI (4.8 MPa)
AT 28 DAYS WITH FREEZE-THAW CYCLING	250 PSI (1.7 MPa)	>500 PSI (3.4 MPa)
AT 28 DAYS HEAT AGING	400 PSI (2.7 MPa)	>800 PSI (5.5 MPa)
<b>QUARRY TILE SHEAR STRENGTH, PSI</b>		
AT 28 DAYS	150 PSI (1.0 MPa)	>300 PSI (2.0 MPa)
AT 28 DAYS WITH FREEZE-THAW CYCLING	100 PSI (0.6 MPa)	>200 PSI (1.3 MPa)
* DUE TO THE WIDE VARIABILITY IN NATURAL STONE PHYSICAL CHARACTERISTICS AND STRENGTHS, TESTING IS PERFORMED WITH MANUFACTURED TILE FORMATS		
	TMS 402/602 REQUIREMENTS	SPEC MIX XP500 (TYPICAL RESULTS)
<b>BOND STRENGTH</b>		
AT 28 DAYS (ASTM C 482)	50 PSI (0.3 MPa)	>400 PSI (2.8 MPa)

XP500 is the masonry veneer adhesive rigorously tested to meet building code and performance standards. Backed by 15 & 25 year warranties and preferred by masons, XP500 is the superior mix.





# COVERAGE RATES

## ADHERED VENEER MORTAR

APPLICATION	80 lb (36.2 kg) Bag	3,000 lb (1,360.7 kg) Bag
Scratch Coat	20 to 23 ft <sup>2</sup> (1.8 to 2.1 m <sup>2</sup> )	750 to 860 ft <sup>2</sup> (70 to 80 m <sup>2</sup> )
Bond Coat	24 to 26 ft <sup>2</sup> (2.2 to 2.4 m <sup>2</sup> )	900 to 975 ft <sup>2</sup> (84 to 91 m <sup>2</sup> )
Joint Grout - ½ in (13 mm) Joints	38 to 40 ft <sup>2</sup> (3.5 to 3.7 m <sup>2</sup> )	1,425 to 1,500 ft <sup>2</sup> (132 to 139 m <sup>2</sup> )
Full Installation (Scratch, Bond & Joint)	13 to 15 ft <sup>2</sup> (1.2 to 1.4 m <sup>2</sup> )	485 to 560 ft <sup>2</sup> (45 to 52 m <sup>2</sup> )

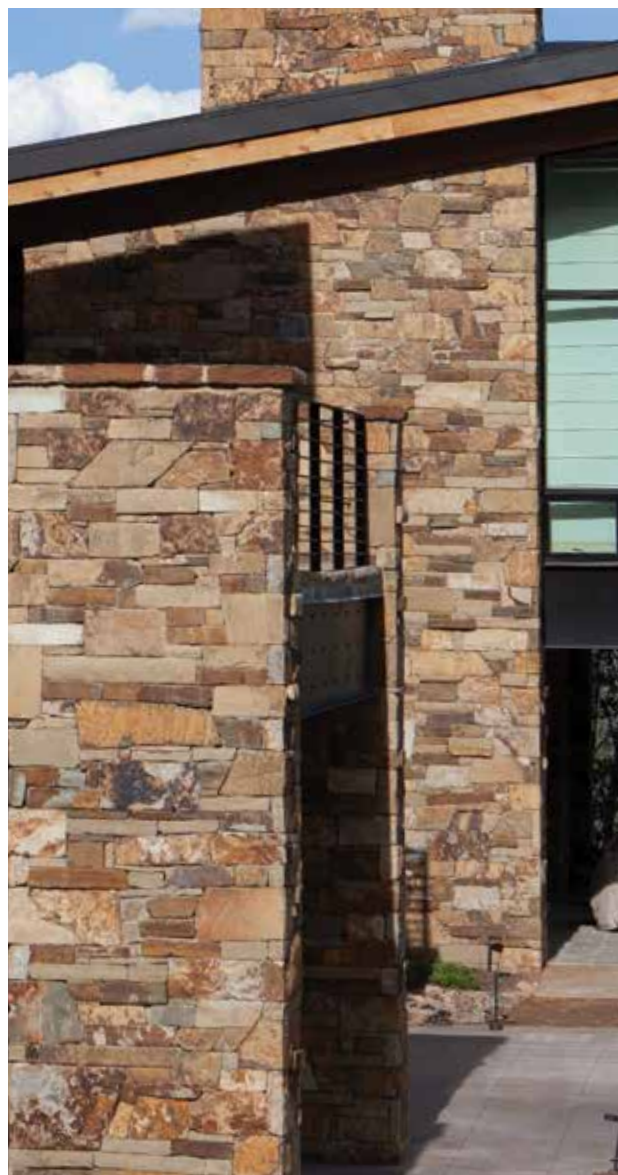
## POLYMER MODIFIED ADHERED VENEER MORTAR

APPLICATION	80 lb (36.2 kg) Bag	3,000 lb (1,360.7 kg) Bag
Scratch Coat	20 to 23 ft <sup>2</sup> (1.8 to 2.1 m <sup>2</sup> )	750 to 860 ft <sup>2</sup> (70 to 80 m <sup>2</sup> )
Bond Coat	24 to 26 ft <sup>2</sup> (2.2 to 2.4 m <sup>2</sup> )	900 to 975 ft <sup>2</sup> (84 to 91 m <sup>2</sup> )
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## THIN VENEER ADHESION MORTAR XP500

APPLICATION	50 lb (22.6 kg) Bag
Bond Coat - 1/4 in x 3/8 in (6.3 mm x 9.5 mm) NOTCHED TROWEL	60 to 70 ft <sup>2</sup> (5.5 to 6.5 m <sup>2</sup> )
Bond Coat - 1/2 in x 1/2 in (13 mm x 13mm) NOTCHED TROWEL	40 to 45 ft <sup>2</sup> (3.7 to 4.2 m <sup>2</sup> )
Coating Masonry Unit Method	30 to 33 ft <sup>2</sup> (2.8 to 3.0 m <sup>2</sup> )

Note: Coverage is approximate and will vary depending on workmanship, method of installation, substrate, style of stone, waste and regional variation.



For more information on the installation of masonry veneer systems contact:



[www.imiweb.org](http://www.imiweb.org)



[www.ncma.org](http://www.ncma.org)



[www.ncma.org/manufactured-stone-veneer/](http://www.ncma.org/manufactured-stone-veneer/)



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