



**DUTCH QUALITY STONE**

CRAFTSMANSHIP BORN OF TRADITION

**ARCHITECTURAL BINDER**



DUTCH QUALITY  
STONE

# INSTALLATION GUIDELINES

At Dutch Quality Stone, we realize the value of a proper installation. Installing our stone the right way creates a long-lasting, attractive, safe and reliable wall system.

The NCMA (National Concrete Masonry Association) consists of a dedicated team of manufactured stone professionals, representing stone veneer companies across the nation. One of the most important projects completed by the NCMA Technical Committee is the development of a highly detailed and carefully researched installation guide. The latest version of that guide can be downloaded at [www.dutchqualitystone.com/installation](http://www.dutchqualitystone.com/installation). These guidelines are intended to share over 40 years of knowledge and understanding regarding the proper installation of manufactured stone veneer products.



Note: It is important to recognize that Dutch Quality Stone is a veneer, a facing attached to the wall for purposes of providing ornamentation. It is not intended as a structural product or a waterproofing element. Most importantly, the real subject matter expert is your local building department and the local building code. Your local building code will supersede all other written or verbal installation guides provided by Dutch Quality Stone or the NCMA.

Installation Guide and Detailing Options for  
**Compliance with ASTM C1780**

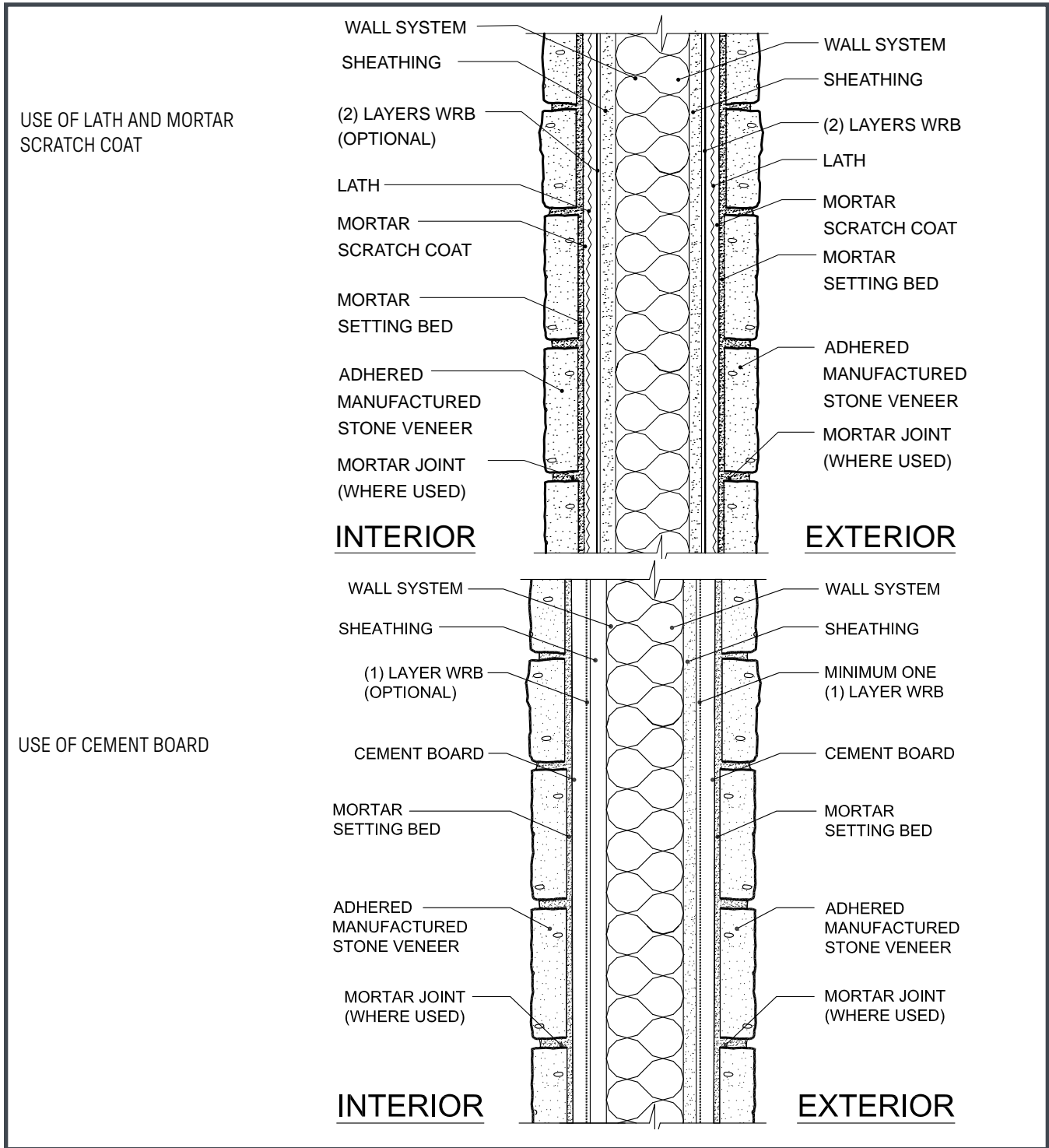
For Adhered Manufactured Stone Veneer 5th Edition, 3rd Printing

NATIONAL  
CONCRETE MASONRY  
ASSOCIATION

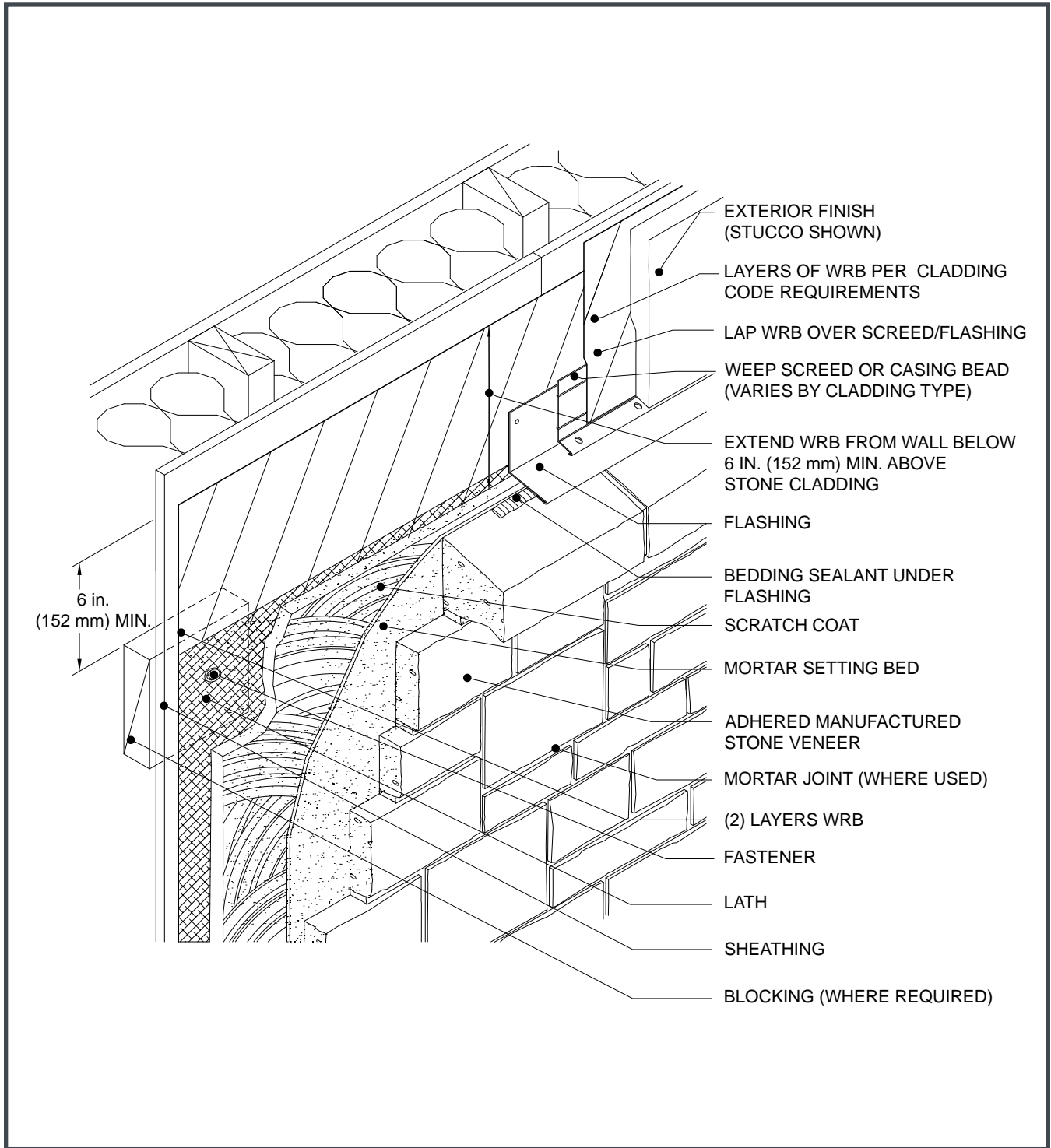


**N C M A**  
**M S V**

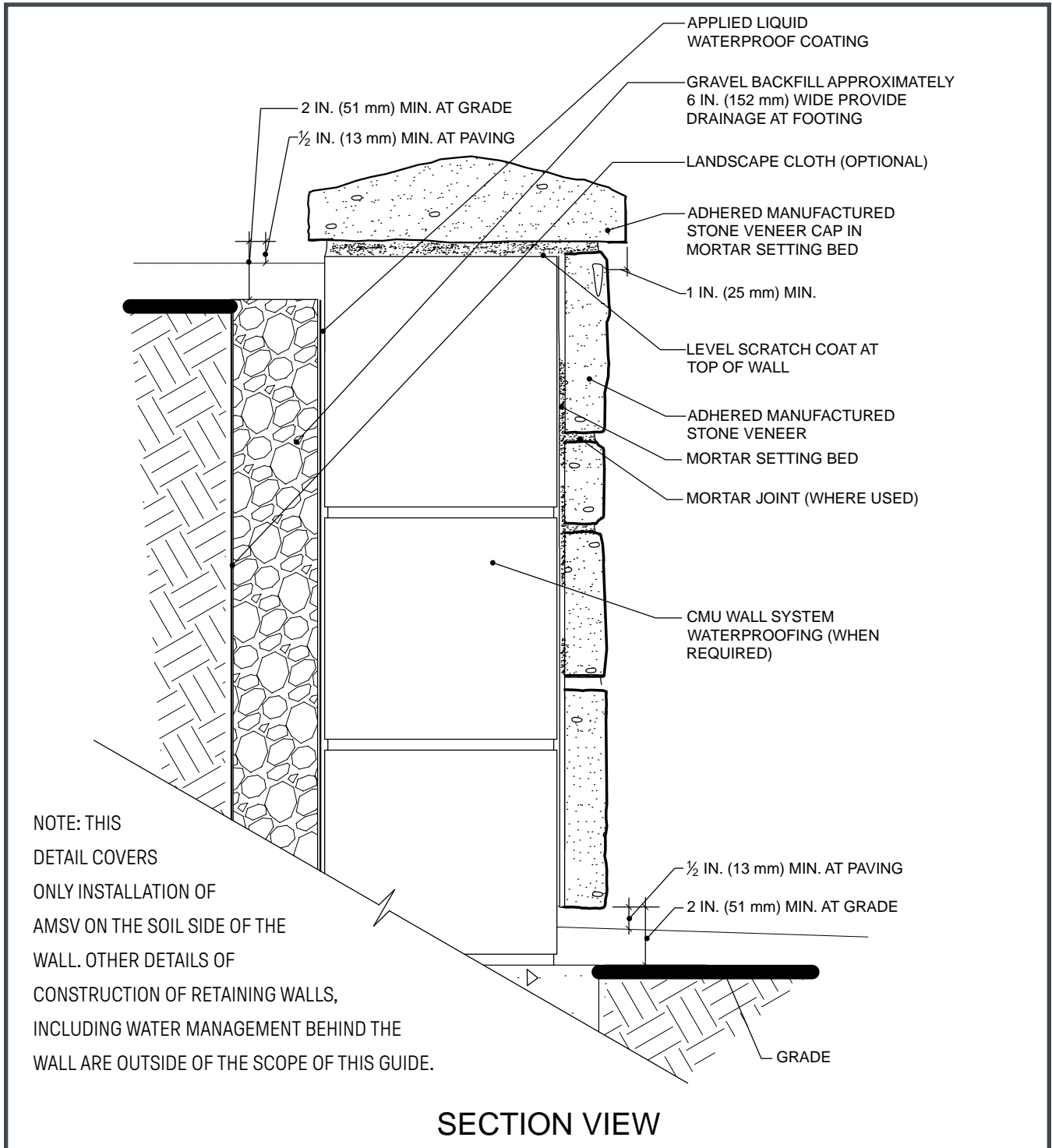
## Typical Frame Wall Section



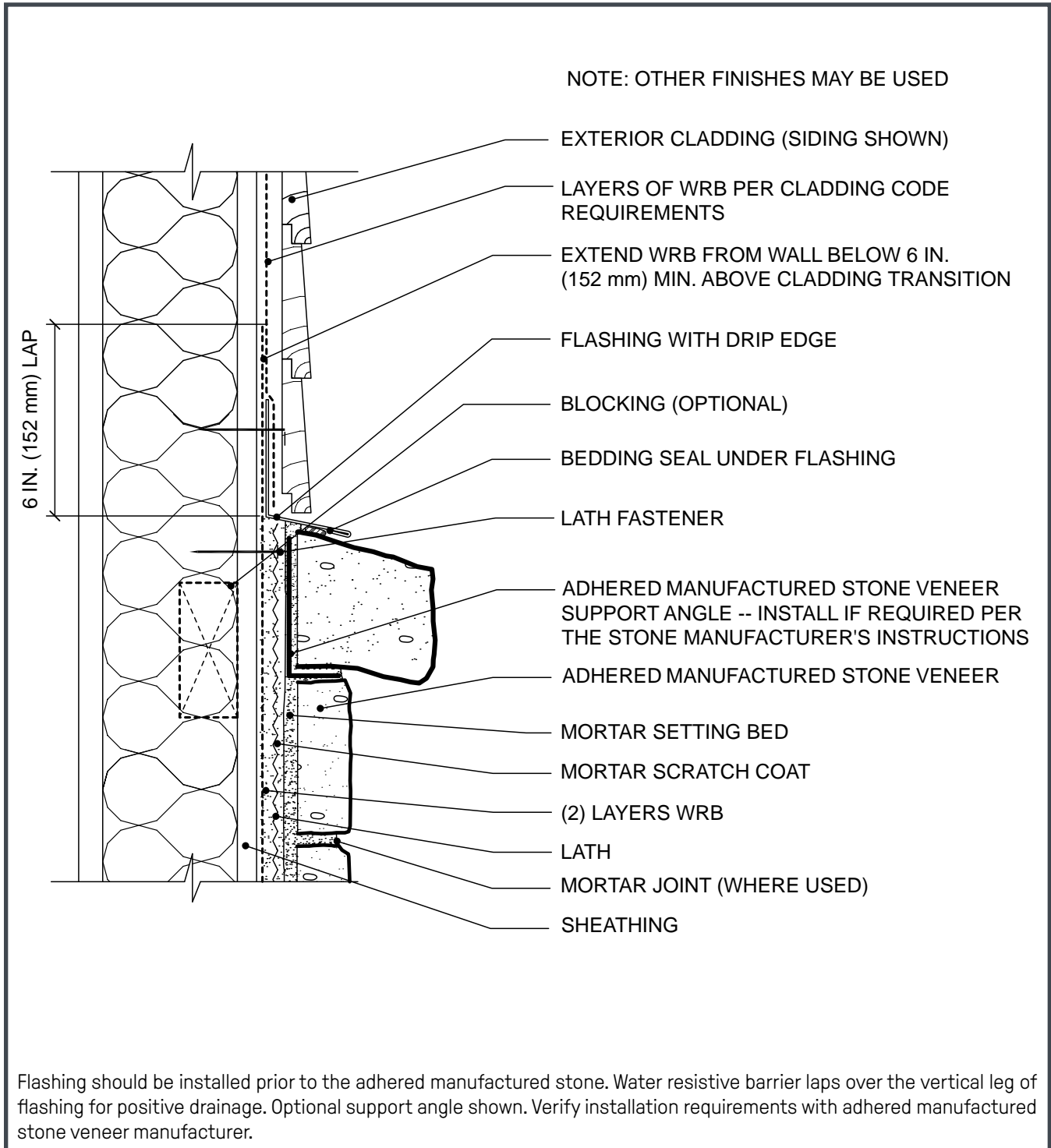
## Wall Assembly Transition



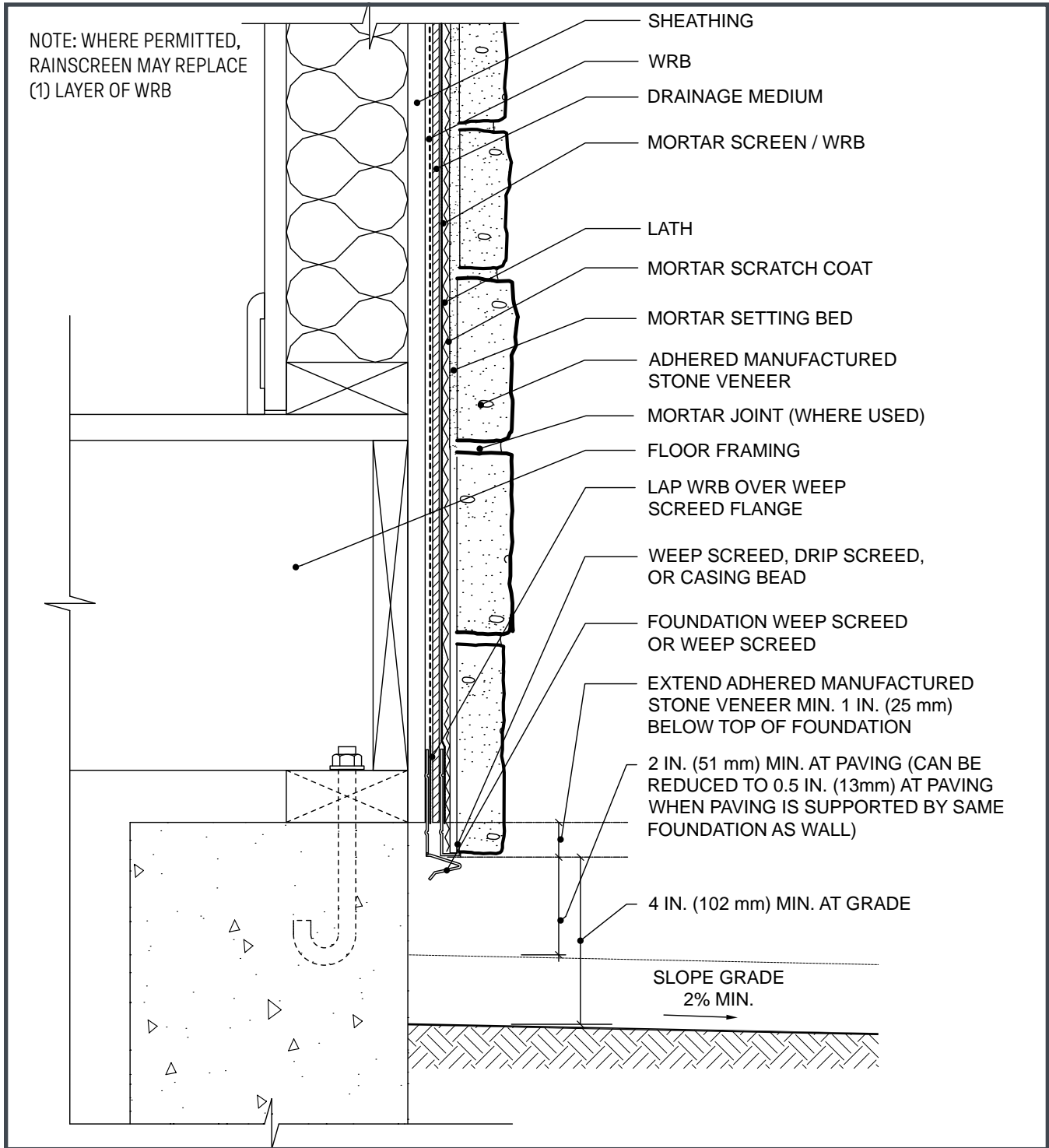
## Retaining Wall (CMU)



## Cladding Transition



## Foundation Wall Base - Rainscreen System







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# TECHNICAL RESOURCES

ONLINE DIRECTORY

Dutch Quality Stone is designed to meet or exceed building code requirements. Independent testing confirms compliance with ICC-ES Acceptance Criteria 51 and ASTM C1670, standard specification for Adhered Stone Veneer. Local building codes may vary by area. Always check with your local building authorities before installing stone. Please visit [www.dutchqualitystone.com/resources](http://www.dutchqualitystone.com/resources) to view all digital materials available for download.

## ARCHITECTURAL RESOURCES

BIM & CAD Files

## FAQ

Dutch Quality FAQs

## BROCHURES

Dutch Quality Brochure

Dutch Quality Brochure - French

## INSTALLATION

NCMA Installation Guide

Care & Maintenance

## TECHNICAL INFORMATION

Technical Evaluation Report

Technical Data Sheet

Safety Data Sheet (SDS)

Dutch Quality Warranty

Technical Data Sheet

ICC-ES Evaluation Report

CSI 3-Part Spec

# FAQS

FREQUENTLY ASKED QUESTIONS



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## WHAT ARE THE BENEFITS OF USING MANUFACTURED STONE?

Manufactured stone provides the realism of natural stone at an installed cost of a fraction of natural stone. Because Dutch Quality manufactured stone is made of lightweight material it is classified as an adhered veneer as does not require a footing or mechanical support for installation.

## CAN I INSTALL DUTCH QUALITY ADHERED STONE VENEER DIRECTLY TO CEMENT BOARD?

Yes, for exterior applications use only cement board that complies with ASTM C1325. For interior installations, any ½" or 5/8" cement board product is acceptable. Always bond the stone with polymer modified mortar compliant with ANSI A118.4 or ANSI A118.15. Do not use conventional Type S mortar for bonding Dutch Quality Stone to cement board. Adhered veneer as does not require a footing or mechanical support for installation.

## FOR WHAT APPLICATIONS SHOULD I AVOID ADHERED MANUFACTURED STONE VENEER?

Adhered stone veneer is designed and intended as a wall covering. Using adhered stone veneer on a horizontally oriented fashion is not preferred. Do not use adhered stone veneer as a paver or a wall cap. Do not install adhered stone in a situation in which continuous or frequent exposure to water is possible such as pool or Jacuzzi copings or surrounds. Adhered stone veneer is not intended to be installed on stair risers where de-icing salts or snow shovels can damage the stone facade.

## WHAT ARE THE RECOMMENDED METHODS OF BONDING DUTCH QUALITY ADHERED MANUFACTURED VENEER?

Type S mortar complying with ASTM C270 is the most common mortar used to bond adhered stone veneer. For additional strength in challenging conditions use polymer modified mortars. The polymer modified mortars provide a superior bond which exceeds the minimum bond strength by a factor of 5X or greater. Polymer modified mortars also allow for stone movement during installation without losing bond strength making it a great choice for tight dry stacked stone profiles.

Note, always back-butter the entire surface of the stone back. The thickness of the mortar should average about ½" when the stone is pressed into place on the wall. Stair risers where de-icing salts or snow shovels can damage the stone facade.

# FAQS

FREQUENTLY ASKED QUESTIONS



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## **DO I NEED TO SEAL OR COAT THE ADHERED STONE VENEER AFTER INSTALLATION?**

Applying a sealer or coating which is not capable of “breathing” will jeopardize the long-term health of the wall structure. Moisture which can collect in the wall system must be able to dry out through the wall covering. However, the application of a silane or siloxane water repellent is recommended option to prevent water absorption into the stone while rendering the color, texture and breathability of the stone veneer unaffected. For the health and safety of the application, select a water-based (rather than a solvent-based) silane or siloxane repellent. These products can be brushed, rolled or sprayed on the stone veneer.

## **WHY CAN'T I INSTALL THE ADHERED MANUFACTURED STONE VENEER DOWN TO GRADE LEVEL, OR BELOW?**

The building code requires a clearance between the stone veneer and the grade or ground level. There are several reasons for this and most of these reasons involve protection of the wall, not the stone! Behind the stone veneer is a drainage plane which was created when the weather resistive barrier was installed. The purpose of this plane is to collect and direct any water which squeaks behind the wall façade downward and out the base of the wall. If the base of the veneer wall is at or below grade, proper drainage will be impaired. Secondly, water which pools or collects at the wall base can rise into the wall through capillary action and enter the structure. Thirdly, if the veneer is in contact with vegetation (grass, plants, etc) growth into the wall is possible. Also, bugs and insects, including termites will find it convenient enter the wall system when the wall is in direct contact with earth. Finally, the stone is not designed to be continually wet or subject to the harsh chemicals found in soils.

# 50-YEAR TRANSFERABLE EXPRESS LIMITED WARRANTY

BORAL STONE PRODUCTS / DUTCH QUALITY STONE



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1. Subject to the following terms, Boral Stone Products, LLC (“BSP”) warrants under this express limited warranty (“Warranty”) to the original purchaser and subsequent owners of its Dutch Quality Stone™ brand manufactured stone or brick veneer (collectively, the “Product” or the “Products”) that for fifty (50) years from the date of the sale of the Product, the Product will not blister, peel, flake, delaminate or crack excessively (each, a “Defect”) as a result of manufacturing defects when used on structures (each, a “Structure”) conforming to local building codes and installed in accordance with the National Concrete Masonry Association’s written instructions issued before and closest in time to original date of the installation of the Product in the Structure. The definition of “veneer” contained in the International Building Code is determinative for purposes of establishing what Products constitute BSP’s manufactured stone or brick veneer and are covered by this Warranty.
2. In the event of a Defect, BSP will, at its option, either: (1) pay the reasonable replacement cost of the defectively manufactured Product; (2) provide a replacement of the defective Product or a Product of a similar design; or (3) pay the reasonable cost for repair of the defective Product. This Warranty applies only to Products manufactured by BSP and does not apply to any other products or materials, including exterior walls, exterior wall envelopes, backing to which Products are secured, or water-resistive barriers.
3. This Warranty runs with the sale or transfer of the Structure into which the Products have been incorporated to subsequent owners of the Structure, but the warranty period as to such subsequent owners is limited to fifteen (15) years from the original date of sale of the Product.
4. No warranty whatsoever is made with respect to the manufacture or performance of materials or components of construction not sold or manufactured by BSP, including, but not limited to, mortar, lath, weather resistant barriers, doors, windows, sealants, flashings, roofing, copings, sheathing and framing. Further, BSP makes no warranties whatsoever with respect to aesthetics, design and engineering of the Structure into which Products are incorporated, or workmanship involved in the application of any Products warranted hereunder. The Product is not waterproof and should not be used on exterior or interior steps or risers. The Product must be incorporated into a wall assembly designed by a building professional that contains adequate mechanisms for water management. BSP has no responsibility for damage caused by moisture intrusion through the building envelope or around any of the building envelope components or by vapor transmission from the inside of the Structure to a moisture sensitive part of the wall assembly.
5. This Warranty covers only manufacturing defects in the Products. BSP’s manufacturing process has been designed to imitate the random beauty and nature of real stone. As such, stone surfaces on the Products may contain small air holes or surface anomalies. These differences add to the overall character of the Products and are not considered manufacturing defects. Changes in the appearance of Products caused by normal weathering or efflorescence, which is a natural phenomenon of all concrete products, are also not considered manufacturing defects. Normal weathering is defined as exposure to sunlight and extremes of weather and atmosphere, which will cause any colored surface to fade, chalk, or accumulate dirt or stains.

**THIS WARRANTY IS EFFECTIVE FOR SALES AFTER NOVEMBER 11, 2020 (“EFFECTIVE DATE”)  
AND SUPERSEDES ALL PREVIOUSLY PUBLISHED VERSIONS OF THIS WARRANTY FOR PRODUCTS  
SOLD ON OR AFTER THE EFFECTIVE DATE. LAST MODIFIED: NOVEMBER 11, 2020.**

Dutch Quality Stone, 18012 Dover Road, Mt. Eaton, Ohio 44659 | PH: 330.359.7866 FAX: 330.359.5990 877.359.7866

# 50-YEAR TRANSFERABLE EXPRESS LIMITED WARRANTY

BORAL STONE PRODUCTS / DUTCH QUALITY STONE



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6. Without limiting anything else in this Warranty, BSP disclaims and assumes no liability for the following:
  - a. improper use, application or installation of Products;
  - b. use of Products as part of improperly designed or constructed assemblies or Structures or with defective adjacent materials or assemblies;
  - c. failure to follow applicable specifications, instructions and construction details;
  - d. use of any sealing or coating on the Product other than one that is silane or siloxane and based in strict compliance with sealant manufacturer's instructions;
  - e. other design or construction defects, deficiencies and failures on a Structure where Product is used;
  - f. undertaking on-site inspections or any on-site activities or making oral statements at the site;
  - g. any damage or injury whatsoever caused in whole or in part by acts of God, natural phenomenon or physical abuse, such as, but not limited to, falling objects, projectiles, fire, earthquake, floods, windstorm, hail, tornadoes, lightning, hurricanes, other abnormal weather conditions, pests, chemical fumes, foreign substances in the air, misuse, vandalism, civil disobedience, war, damage caused by remodeling or renovation;
  - h. damage resulting from moisture intrusion, mold, settlement of Structure or other Structure or wall movement;
  - i. discoloration or deterioration due to airborne contaminants, contact with any chemicals or paint, staining or oxidations;
  - j. any accumulation of water or moisture in wall assemblies;
  - k. negligence or accidents by any party or parties in maintaining the Products, including, but not limited to, use of a pressure washer or harsh or acid chemicals of any nature, including vinegar, to clean;
  - l. replacement of Product if Product is mixed with other chemicals or materials not approved by BSP in writing;
  - m. any cause beyond BSP's control; and
  - n. any workmanship, aesthetics or other damage or injury not solely and directly caused by a manufacturing defect in Products as covered under this Warranty.
  
7. This Warranty is exclusive, the only warranty made by BSP with respect to the Products, and is in lieu of all other warranties or remedies of any nature whatsoever to the original purchaser or subsequent owners under any theory of liability, whether in contract, tort, statutory law or otherwise, except for actual economic damages for personal physical bodily injury. All other warranties, representations or remedies with respect to the Products, whether oral, written, express or implied or imposed by law, are disclaimed by BSP and are waived by the original and subsequent purchasers, particularly the implied warranties of merchantability or fitness for a particular purpose or arising from a course of dealing, usage or trade practice, or any warranty against patent infringement or warranty for work performed in a workmanlike manner. BSP shall not be liable under any circumstances for any incidental, special, indirect or punitive damages to any party whatsoever, including but not limited to, loss of profits, damage to the Structure or its contents, and attorney's fees. This exclusion of damages includes, but is not limited to, payments of any nature made because of actual or potential liability to others, damages to any other part of the Structure to which the Products are incorporated or damage to any other property.

# 50-YEAR TRANSFERABLE EXPRESS LIMITED WARRANTY

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8. BSP shall have no further obligation or liability of any kind, other than as stated in this Warranty, and it is further agreed and understood that the price paid for Products is consideration for the limitation of BSP's liability hereunder.
9. Warranty coverage is limited as set forth herein and does not cover labor to remove or install Products and does not cover the cost of shipping replacement Product. The remedies contained herein shall be sole and exclusive.
10. BSP's obligations under this Warranty shall only begin if the original purchaser or subsequent owner notifies BSP, in writing, within sixty (60) days of actual or constructive notice of the alleged Defect. BSP shall be allowed a reasonable period of time and authorization to remove samples of the Product, so as to perform any testing BSP deems necessary to investigate and determine the cause of the alleged Defect. The original purchaser or subsequent owner shall make temporary repairs in a timely manner to prevent further damage to the Structure, contents of the Structure, and the Products until the cause of the alleged Defect is determined and permanent repair recommendations may be made, as applicable.
11. BSP's obligation to supply replacement Product pursuant to this Warranty shall become null and void if, in the sole judgment of BSP, any of the following events shall occur: (i) if after installation of the Products there are any alterations or repairs made to the Structure that affect any component of the wall assembly of which Products are a part in any way; (ii) if the original purchaser or subsequent owner or any of their respective tenants fail to use reasonable care in maintaining the Products before and after installation; (iii) if the Products are installed in a manner that causes them to be repeatedly or continuously wet, such as if installed in the direct path of a water sprinkler, pool, jacuzzi, or similar water device; or (iv) if the Products are installed in an area that exposes them to de-icing salts or other harsh chemicals.
12. Applicability of the Magnusson-Moss Act is hereby disclaimed.
13. Any provision of this Warranty that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof or affecting the validity of enforceability of such provision in any other jurisdiction.
14. BSP's failure at any time to enforce any of the terms or conditions stated herein shall not be construed to be a waiver of such provisions.
15. This Warranty shall be interpreted under the laws of the State of New York.
16. Neither the sales personnel nor other agents of BSP are authorized to make warranties about the Products. Oral statements by BSP employees or agents do not constitute warranties, shall not be relied upon by
17. the original purchaser or subsequent owner or any third party, and are not part of the contract for sale or warranty as stated herein. No distributor, dealer or representative of BSP has the authority to change or modify this Warranty either orally or in writing in any respect. The entire and final contract is embodied in this Warranty and no other warranties are given beyond those set forth in this Warranty.