

WEEP SYSTEMS MOISTURE CONTROL SYSTEMS



See our web page for new, three-part architectural specs and detailed drawings.

www.masonrytechnology.com

Phone: 563-547-1122

1-800-879-3348

Fax: 563-547-1133



CADdetails.com
PRODUCT SPEC-SHEETS

This publication is an installation manual and a product catalog.

It is a “tool” that will **empower** the construction professional to plan and build structures with effective moisture control systems.

We are confident that you will find Masonry Technology’s “tunnel” weep systems, Trash Mortar Diverter and moisture control devices an effective means of **removing moisture** from building systems. Call us today for the distributor or representative nearest you.



John H. Koester (with Spotz),
President & Founder
Masonry Technology, Inc.

The MTI Difference

Only Masonry Technology, Inc. products put the “tunnel” weep holes at the **lowest point** of the wall, where the water is — and allows all the water to escape every time.

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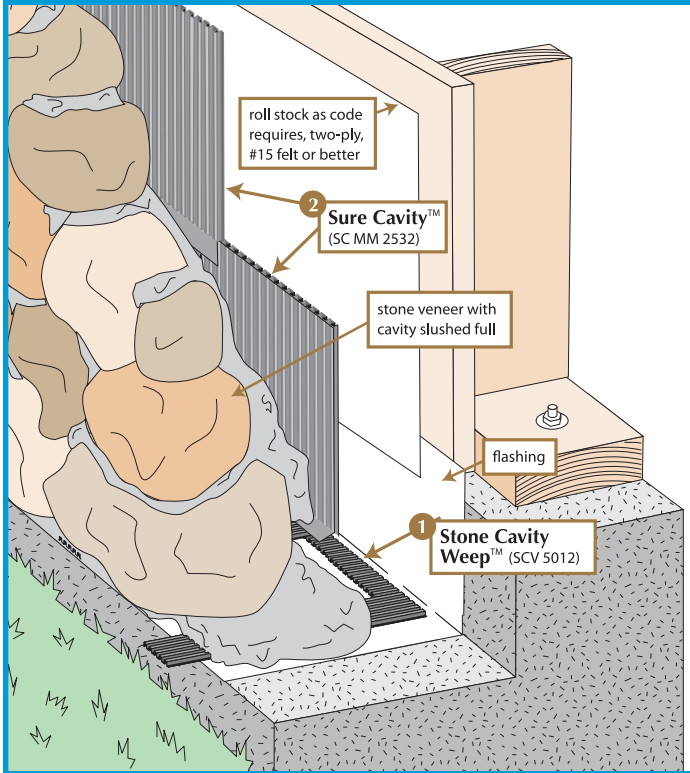
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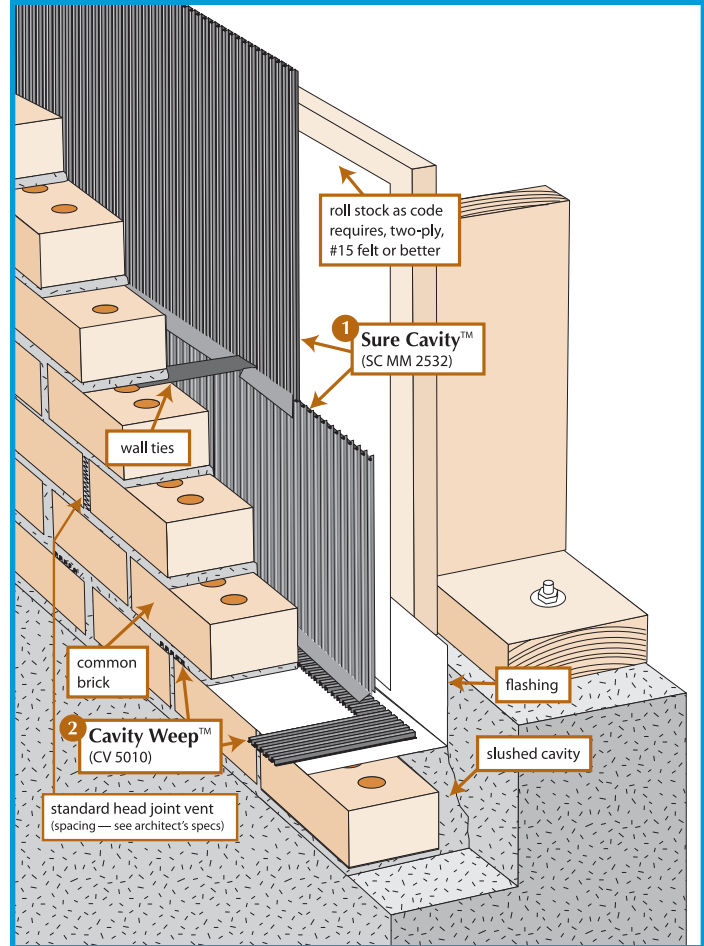
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info@masonrytechnology.com

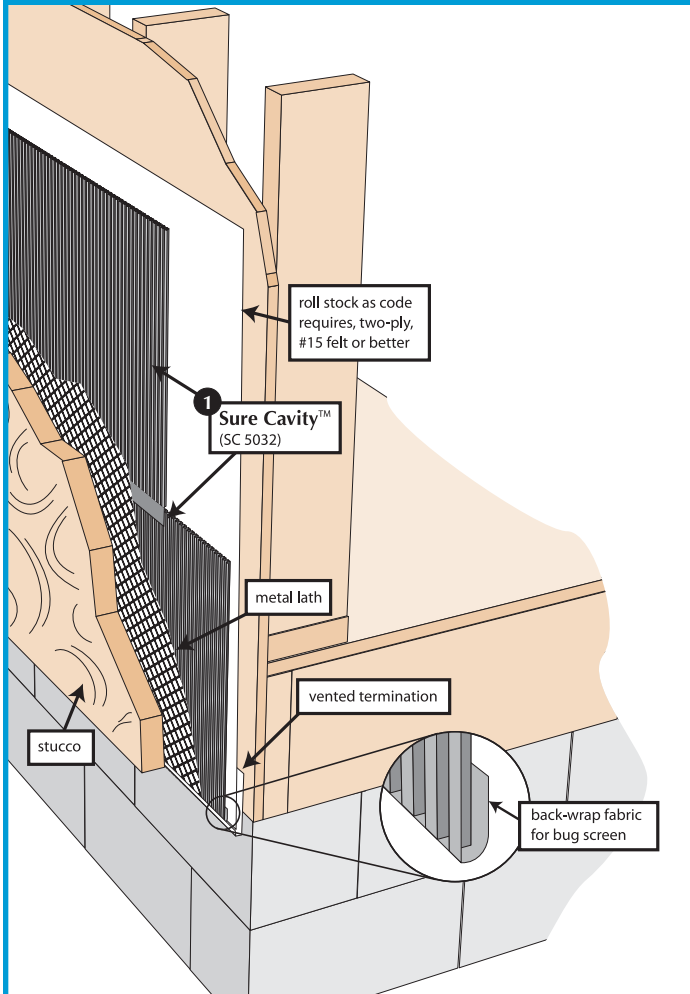
NATURAL STONE



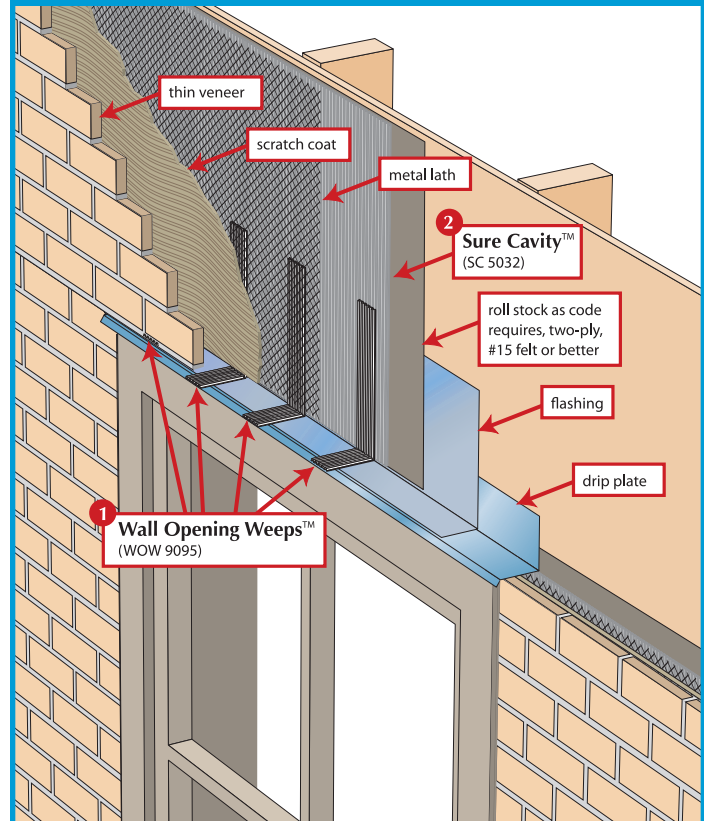
BRICK



STUCCO



THIN-SET MASONRY VENEERS



TEST RESULTS

ASTM E96-00

SC 5032:

WVT, Grains/(hr*ft*ft)-8.5
Permeance (perms),
Grains / h x ft x ft x in. Hg20.7
Permeability, perm*inch
(based on total specimen thickness)4.3

SC MM 2532:

WVT, Grains/(hr*ft*ft)-13.8
Permeance (perms),
Grains / h x ft x ft x in. Hg33.6
Permeability, perm*inch
(based on total specimen thickness)13.7

ASTM D1621

SC 5032:

Load at 10% strain, lbf621
Comp. Strength @ 10% strain, psi38.5
Comp. Modulus, psi386

SC MM 2532:

Load at 10% strain, lbf490
Comp. Strength @ 10% strain, psi30.0
Comp. Modulus, psi303

Federal Test Standard 191A

SC 5032 Machine Direction:

No cracking, flaking or other apparent damage to the specimen.

SC MM 2532 Machine Direction:

No cracking, flaking or other apparent damage to the specimen.

ASTM D4632-91(2003)

SC 5032:

Machine Direction
Breaking Load, lb251
Transverse Direction
Breaking Load, lb168

SC MM 2532:

Machine Direction
Breaking Load, lb175
Transverse Direction
Breaking Load, lb136

ASTM D4833-00

SC 5032:

Sure Cavity
Puncture Resistance, lb62.9

SC MM 2532:

Sure Cavity
Puncture Resistance, lb48.7

FEATURES & BENEFITS

- Not a vapor retarder
- Lets moisture through
- Separates veneers from backup walls (no bridging)
- Creates a predictable drainage plane in wall

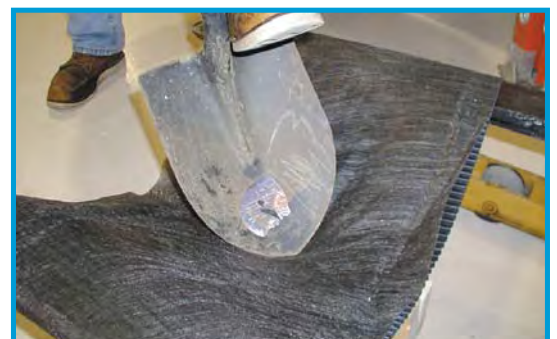
- Very strong
- Will not compress in wall detail
- Creates a stable base for veneers
- No product lost to damage in the field

- Can be installed in a wide range of temperatures
- Will not delay the construction schedule

- Very strong
- Will not be easily damaged during installation
- Will hold strong with fastening
- No product lost to damage in the field

- Very strong
- Will not be easily damaged during installation
- Will hold strong with fastening
- No product lost to damage in the field

WORKS BECAUSE

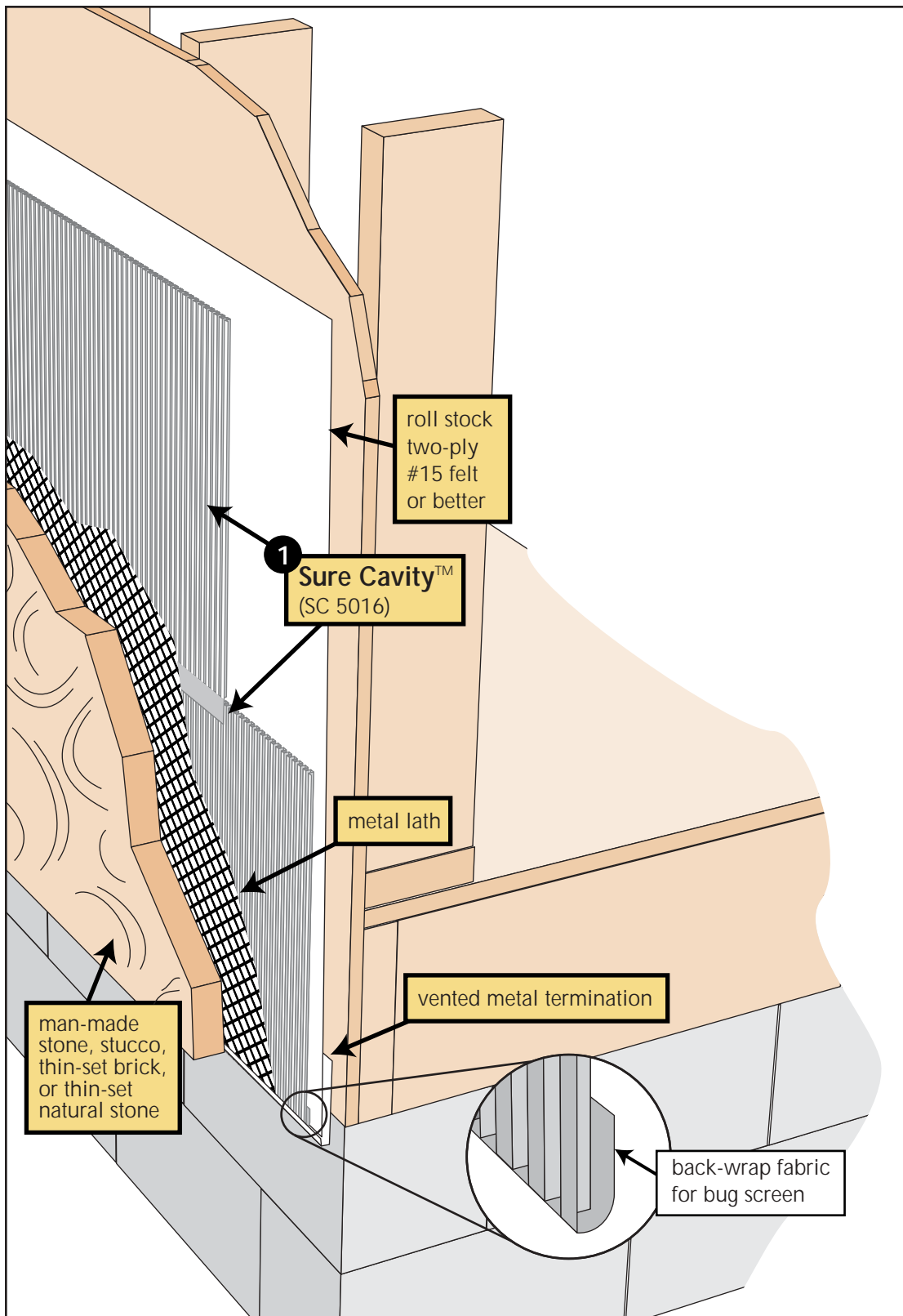


Thin Veneer, Rain Screen System

Thin-Set Brick and Thin-Set Natural Stone

Sure Cavity™ (SC 5016)

see page 26, Wall Opening Weeps™ (WOW 9095)



MTI's thin veneer rain screen system for man-made stone, stucco, thin-set brick and thin-set natural stone works because it **maintains a separation** between the cementous materials used in these systems and the structural back-up walls, while **creating a percolation system** that allows moisture that may enter these systems from the exterior and/or condensation that may accumulate from the interior to **travel downward** and **exit the bottom** of the walls.

1 Sure Cavity™ (SC 5016) Works because:

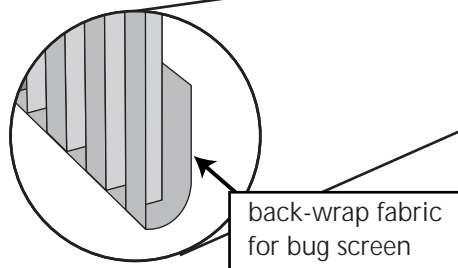
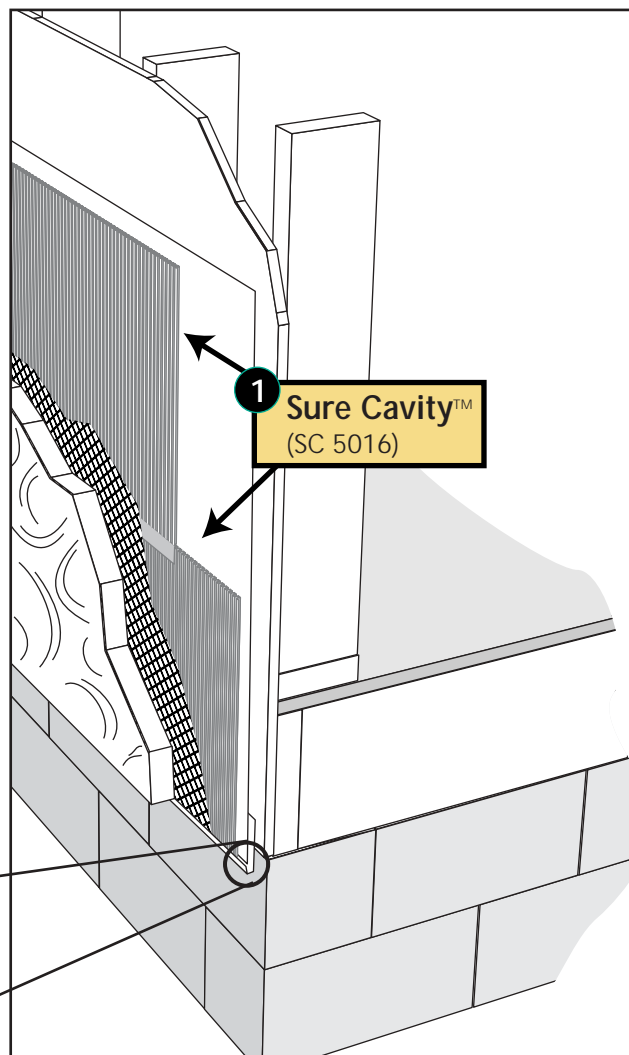
- It separates cementous materials from structural back-up walls while creating a percolation system that allows moisture to travel down and out of walls.
- It prevents bridging.
- The spunbond polypropylene fabric holds cementous materials away from vertical moisture channels.
- 15½" height ¾" thick with a 2" overlapping fabric skirt (50' long rolls).
- Easy to install.

Installation:

1. Position Sure Cavity with spunbond fabric facing to outside of building with 2" skirt wrapped back under bottom on first course.
2. 2" fabric skirt should overlap the top edge of the previously installed Sure Cavity.

Note: Sure Cavity must be installed over two-ply roll stock material #15 felt or better.

Note: #15 felt roll stock material and Sure Cavity must extend down over top of foundation wall a minimum of 2". Terminate bottom of veneers with vented metal termination "weep screen".



ORDERING INFORMATION

1 Sure Cavity™ (part number SC 5016)

Roll Contains

1 Roll of Sure Cavity =
66.66 sq. ft. (50' x 15.5" wide)

Box Contains

4 rolls/box/266.66 sq. ft.

Pallet Contains

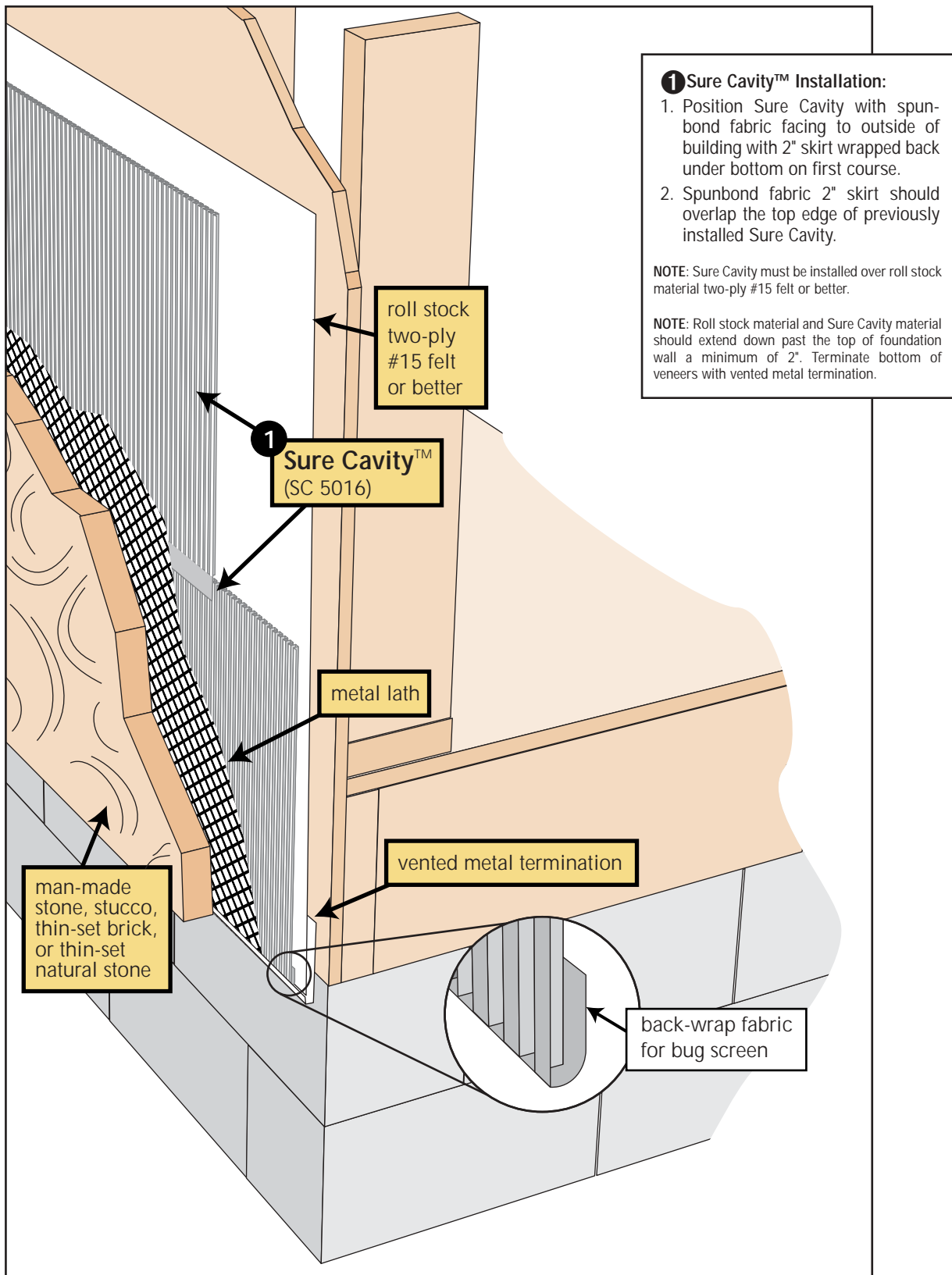
12 boxes/pallet/3199.68 sq. ft.

ORDERING INFORMATION — PAGE 51.

Field Guide

Sure Cavity™ (SC 5016)

Copy this page as a Field Guide for Installation
see pages 26, **Wall Opening Weeps™ (WOW 9095)**



Installation

Sure Cavity™ (SC 5016)



- 1** Install Sure Cavity over two-ply #15 felt with spunbond fabric to exterior of building. 2" fabric skirt should be folded back under bottom on first course of Sure Cavity to create a bug screen. Overlap 2" skirt over top of each course below.



- 2** Install metal lath over Sure Cavity using recommended fastening patterns.



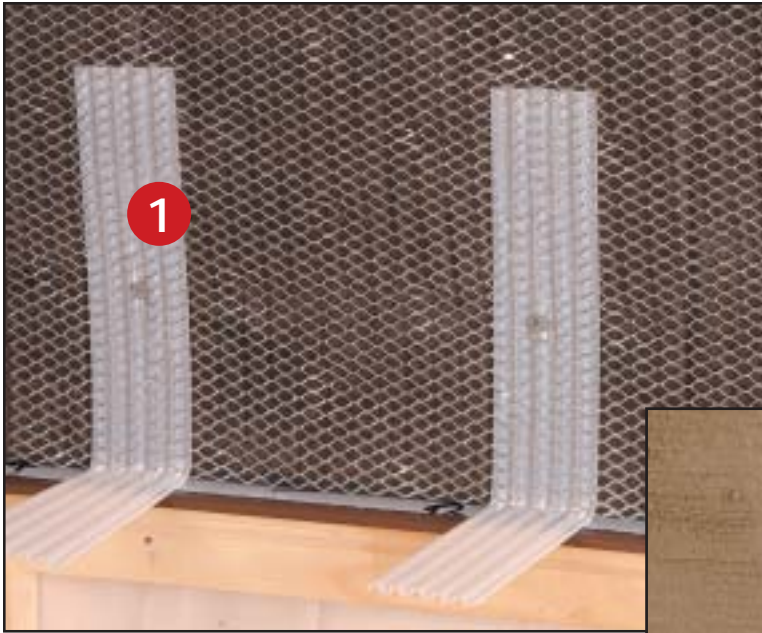
- 3** Apply scratch coat.



- 4** Apply man-made stone, stucco, thin-set brick, or thin-set natural stone veneers.

Weep Systems and Rain Screen Systems for Thin Veneer Wall Applications

Wall Opening Weeps™ (WOW 9095) Sure Cavity™ (SC 5016)



MTI's **Wall Opening Weeps™** and **Sure Cavity™** provide a predictable weep and percolation system for thin veneer wall applications (man-made stone, stucco, thin-set brick, and thin-set natural stone).



1 **Wall Opening Weeps™** weeps thin-veneers over wall openings (doors & windows).

2 **Sure Cavity™** maintains a separation between veneers and structural back-up walls while creating a percolation system that allows moisture to travel down to bottom of walls and thin veneers.

MTI's **Wall Opening Weeps** and **Sure Cavity** work because they **maintain a separation** between the cementous materials used in these systems and the structural back-up walls. **Sure Cavity** creates a **percolation system** that allows moisture that may enter these systems from the exterior and/or condensation that may accumulate from the interior to **travel downward to bottom of walls and exit**. Moisture that may bottom out on top of windows and doors will exit through **Wall Opening Weeps**.

1 Wall Opening Weeps™ (WOW 9095)

Works because:

- They form the bottom edge of the scratch coat and the bottom edge of the thin-set mortar over wall openings (windows and doors).
- They maintain vertical tunnels/channels up into the thin veneer walls.
- They are easy to install.
- They are $\frac{3}{16}$ " thick and fit easily into a thin veneer wall detail.

Installation:

1. Install Wall Opening Weeps 12" on center over all wall openings (windows and doors).
2. Install metal lath directly over Wall Opening Weeps.
3. Apply scratch coat and thin-set veneer mortar.
4. Tool joints and lightly score legs at face of wall and crack off by pushing downward while mortar is still plastic.
5. Finish tool joint and brush.

2 Sure Cavity™ (SC 5016)

Works because:

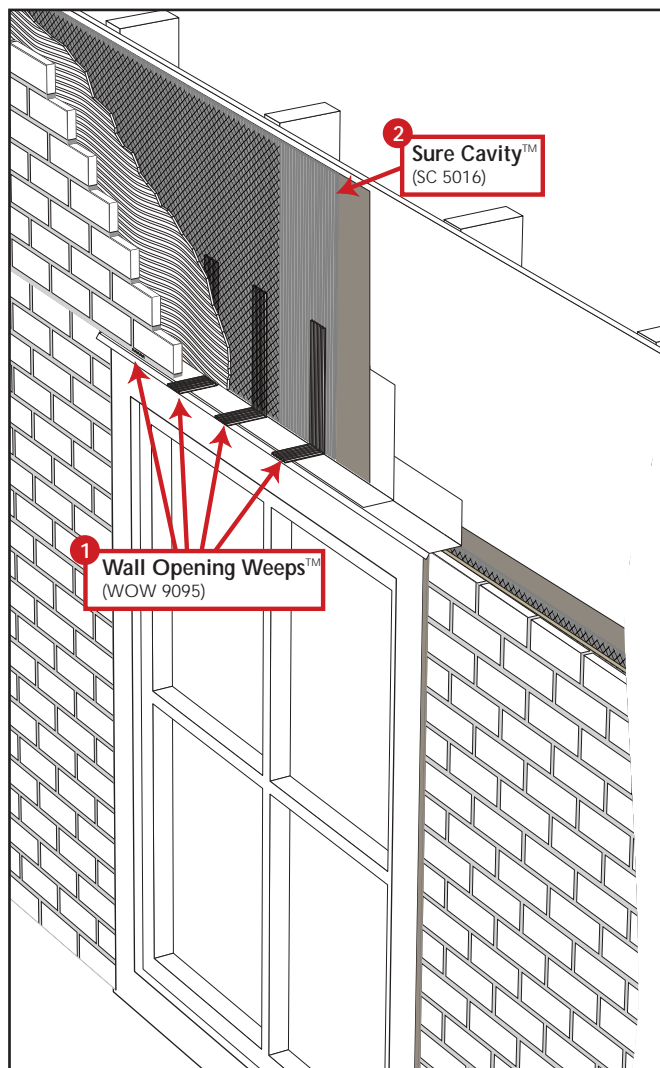
- It separates cementous materials from structural back-up walls while creating a percolation system that allows moisture to travel down and out of walls.
- It prevents bridging.
- The spunbond polypropylene fabric holds cementous materials away from vertical moisture channels.
- 15½" height $\frac{3}{16}$ " thick with a 2" overlapping fabric skirt (50' long rolls).
- Easy to install.

Installation:

1. Position Sure Cavity with spunbond fabric facing to outside of building with 2" skirt wrapped back under bottom on first course.
2. 2" fabric skirt should overlap the top edge of the previously installed Sure Cavity.

Note: Sure Cavity must be installed over two-ply roll stock material #15 felt or better

Note: #15 felt roll stock material and Sure Cavity must extend down over top of foundation wall a minimum of 2".



ORDERING INFORMATION

1 Wall Opening Weeps™ (part number WOW 9095)

Box Contains
100 pieces

2 Sure Cavity™ (part number SC 5016)

Roll Contains

1 Roll of Sure Cavity =
66.66 sq. ft. (50' x 15.5" wide)

Box Contains

4 rolls/box/266.66 sq. ft.

Pallet Contains

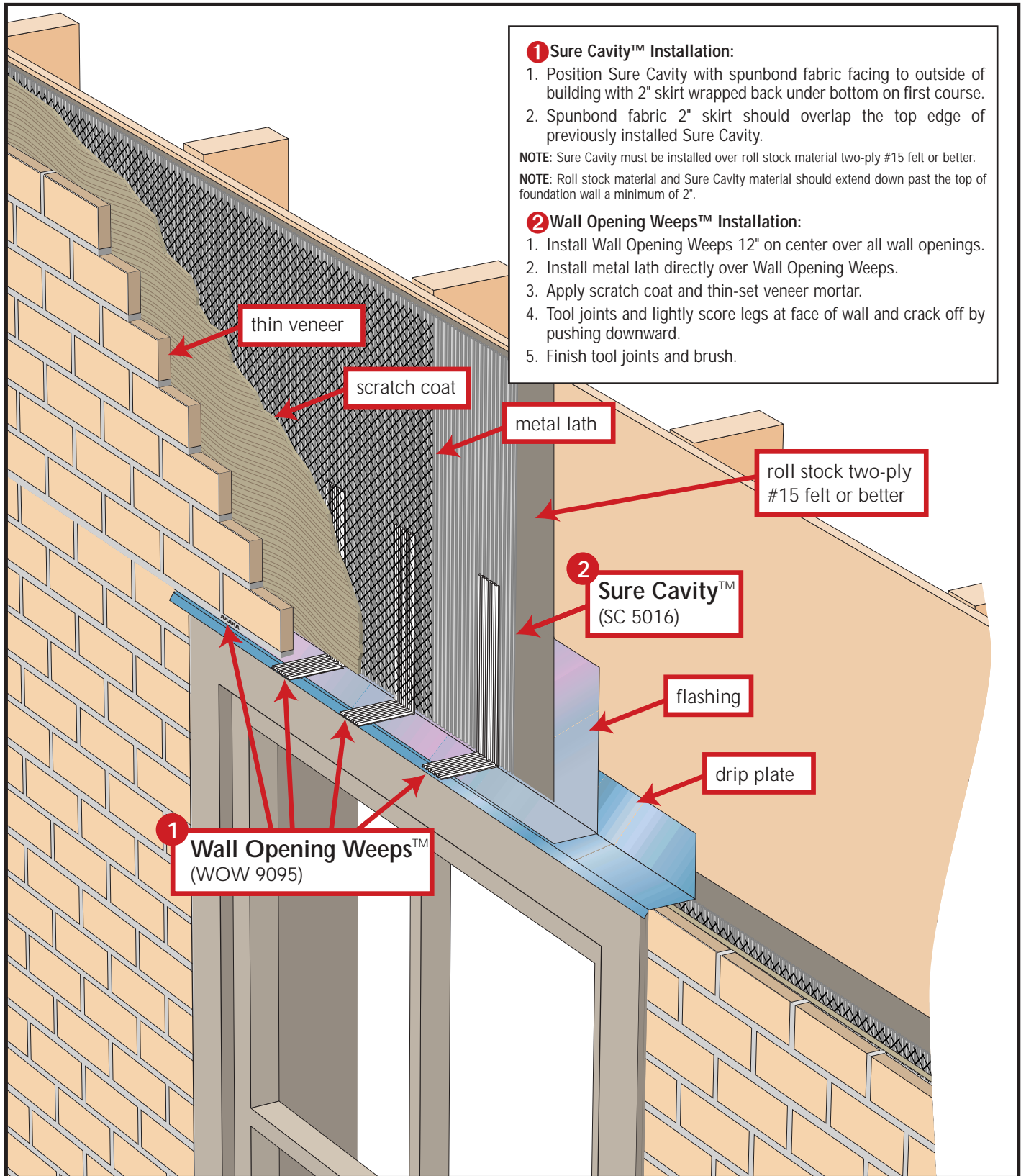
12 boxes/pallet/3199.68 sq. ft.

ORDERING INFORMATION — PAGE 51.

Field Guide

Weep Systems and Percolation Systems for Thin Veneer Walls Wall Opening Weeps™ (WOW 9095) and Sure Cavity™ (SC 5016)

Copy this page as a Field Guide for Installation



Installation

Wall Opening Weeps™ (WOW 9095) and Sure Cavity™ (SC 5016)



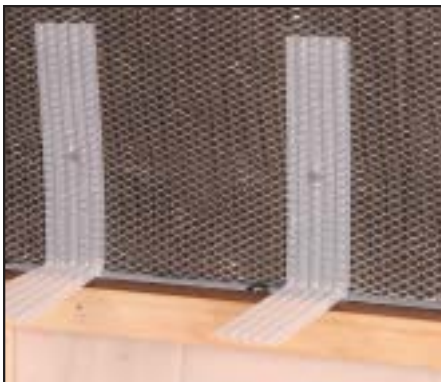
1 Back-wrap 2" skirt at first course on bottom of wall and over all wall openings (windows and doors).



2 2" skirt should overlap top of previous course.



3 Install Wall Opening Weeps on 12" centers over all wall openings (windows and doors).



4 Apply metal lath.



5 Apply scratch coat.



6 Apply thin-set bricks, thin-set natural stone, man-made stone, or stucco.



7 Lightly score top of Wall Opening Weep while mortar is still plastic.



8 Crack off by pushing down.



9 MTI's Sure Cavity and Wall Opening Weeps provide a predictable weep and rain screen system.