

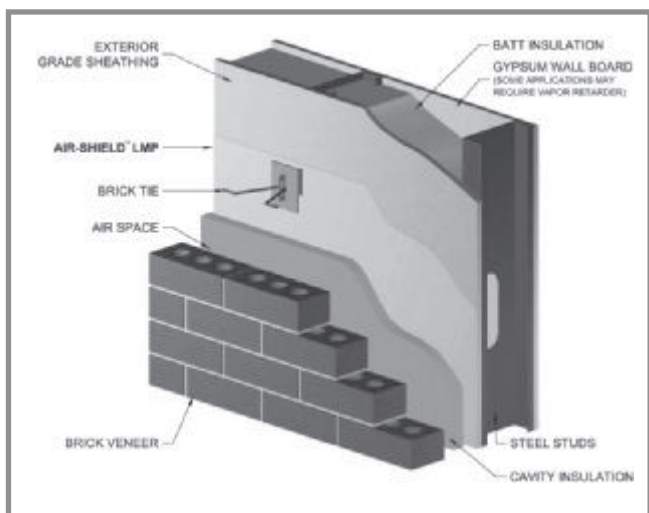
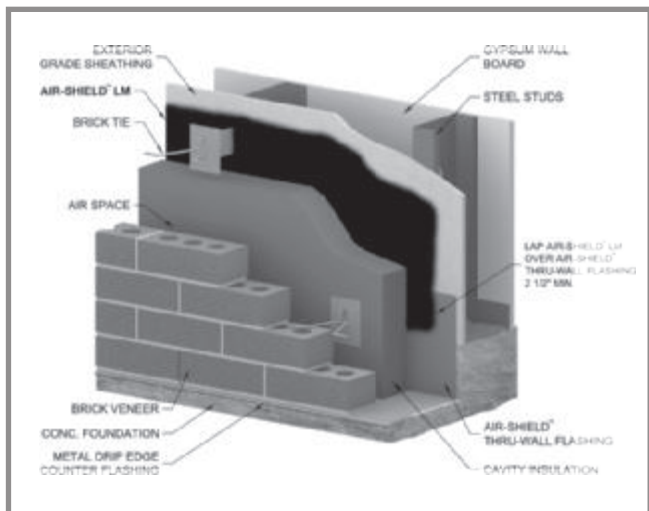
# W. R. MEADOWS AIR BARRIERS



## CONTRACTORS HANDBOOK



W. R. MEADOWS



## Air Barriers

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## THE PRODUCTS

For over 95 years, **W. R. MEADOWS** has been recognized as the leader in developing and producing quality products for the construction industry. We have built a coveted reputation among architects, engineers and contractors for producing the highest quality products backed by 90+ years of experience.

W. R. MEADOWS manufactures a complete line of air/vapor and liquid moisture barriers. When these products are used in combination as a system, they ensure that your project has complete moisture migration protection.

All products are designed to work as a system and are available from your local W. R. MEADOWS authorized distributor. Call W. R. MEADOWS at 1-800-342-5976 to locate a distributor in your area.



### **AIR-SHIELD™**

AIR-SHIELD self-adhering air/vapor and liquid moisture barrier is part of a total W. R. MEADOWS system to complete the building envelope. It is a roll-type product that is nominally 40 mils thick.

The membrane's controlled thickness is fabricated from cross-laminated polyethylene bonded to specially modified asphalt.

This unique, self-adhesive membrane, protected by a special release paper, is strong and durable. It remains flexible when surface mounted and will adhere to most primed surfaces at minimum temperatures of 40° F (4° C). The membrane provides excellent protection as a tough barrier that won't shrink, sag, dry out, crack or rot. It offers excellent resistance to punctures during installation. The self-healing characteristics of AIR-SHIELD facilitate recovery if minimal



damage is sustained under normal use applications, i.e. when penetrated with self-tapping screws or nails.

### **AIR-SHIELD ALUMINUM SHEET MEMBRANE**

AIR-SHIELD ALUMINUM SHEET MEMBRANE self-adhering air/vapor and liquid moisture barrier is part of a total W. R. MEADOWS system to complete the building envelope.



It is a roll-type product that is nominally 40 mils thick. The membrane's controlled thickness is fabricated from aluminum bonded to specially modified asphalt. This unique, self-adhesive membrane, protected by a special release paper, is strong and durable. It remains flexible when surface mounted and will adhere to most primed surfaces at minimum temperatures of 40° F (4.4° C). The membrane provides excellent protection as a tough barrier that won't shrink, sag, dry out, crack, or rot. It offers excellent resistance to punctures during installation.

AIR-SHIELD ALUMINUM SHEET MEMBRANE self-adhering air/vapor and liquid moisture barrier is designed for a variety of uses. Primary applications include cavity wall and masonry wall construction. AIR-SHIELD ALUMINUM SHEET MEMBRANE works equally well as an air and/or vapor barrier on precast concrete, cast-in-place concrete, masonry (concrete block), interior and exterior gypsum board, Styrofoam, primed steel, aluminum mill finish, anodized aluminum, primed galvanized metal, drywall, and plywood.

### **AIR-SHIELD LIQUID FLASHING**

AIR-SHIELD LIQUID FLASHING is a high-quality, gun grade, low-odor, elastomeric, polyether liquid-applied



flashing and detailing membrane. It bonds to most construction materials, such as aluminum, brick, concrete, wood, and vinyl and exterior gypsum board.

#### **AIR-SHIELD LIQUID FLASHING**

is to be used as a liquid-applied flashing, compatible with the entire line of AIR-SHIELD air, vapor, and liquid moisture barriers. This general-purpose, wet flashing membrane is used to seal rough openings and detail joints between exterior gypsum board. AIR-SHIELD LIQUID FLASHING is designed for window and door flashing applications. The product will not harm foam insulation.



#### **AIR-SHIELD LM**

AIR-SHIELD LM is a single-component, liquid-applied, water-based, polymer-modified air/vapor and liquid moisture barrier. AIR-SHIELD LM cures to form a tough, seamless, elastomeric membrane, which exhibits excellent resistance to air and moisture transmission.



AIR-SHIELD LM has been specifically formulated to act as an air/vapor and liquid moisture barrier within the building envelope. It may be applied to most common surfaces and integrated into various wall systems. AIR-SHIELD LM is suitable for both new construction and restoration.

#### **AIR-SHIELD LMP**

AIR-SHIELD LMP is a water-based air/liquid moisture barrier that cures to form a tough, seamless, elastomeric membrane. AIR-SHIELD LMP exhibits excellent



resistance to air leakage. When properly applied as a drainage plane, AIR-SHIELD LMP prohibits liquid water intrusion into the substrate.

AIR-SHIELD LMP has been specifically formulated to act as an air and liquid moisture barrier, allowing vapor to pass through it. It may be applied to most common surfaces and integrated into various wall systems. AIR-SHIELD LMP is suitable for both new construction and retrofit applications.



### **AIR-SHIELD LSR**

AIR-SHIELD LSR (liquid synthetic rubber) is an asphalt-free, single-component, synthetic rubber based liquid air/vapor and liquid moisture barrier. AIR-SHIELD LSR cures to form a tough, seamless, elastomeric membrane, which exhibits excellent resistance to air and moisture transmission.

AIR-SHIELD LSR has been specifically formulated to act as an air/vapor and liquid moisture barrier within the building envelope. It may be applied to most common surfaces and integrated into various wall systems. AIR-SHIELD LSR is suitable for both new construction and restoration.

### **AIR-SHIELD TMP**

AIR-SHIELD TMP is a water-based air/liquid moisture barrier that cures to form a tough, seamless, elastomeric membrane. AIR-SHIELD TMP exhibits excellent resistance to air leakage. When properly applied as a drainage plane, AIR-SHIELD TMP prohibits liquid water



intrusion into the substrate.

AIR-SHIELD TMP has been specifically formulated to act as an air and liquid moisture barrier, allowing vapor to pass through it. It may be applied to most common surfaces and integrated into various wall systems. AIR-SHIELD TMP is suitable for both new construction and retrofit applications.



### **AIR-SHIELD SMP**

AIR-SHIELD SMP is a self-adhesive, vapor permeable, air/liquid moisture barrier that is designed to be fully bonded to the substrate without the use of an adhesive or primer. AIRSHIELD SMP is a tough, durable membrane that exhibits excellent resistance to air leakage and liquid water intrusion, while at the same time allow vapor to readily pass through to allow the wall assembly to dry.

AIR-SHIELD SMP has been specifically formulated to act as an air and liquid moisture barrier, allowing vapor to pass through it. It may be applied to most common surfaces and integrated into various wall assemblies. AIRSHIELD SMP is suitable for both new construction and retrofit applications and works equally well as an air barrier on precast concrete, cast-in-place concrete, masonry (concrete block), interior and exterior gypsum board, Styrofoam, primed steel, aluminum mill finish, anodized aluminum, primed galvanized metal, drywall, and plywood.

AIR-SHIELD SMP can also be used as a transition membrane with AIR-SHIELD LMP and AIR-SHIELD TMP.





**ACCESSORIES**

AIR-SHIELD 25 MIL FLASHING TAPE

AIR-SHIELD BUTYL FLASHING

AIR-SHIELD THRU-WALL FLASHING

BEM

MEL-PRIME™

MEL-PRIME W/B

POINTING MASTIC

POURTHANE® NS

REINFORCING FABRIC HCR

TERMINATION BAR

**THE APPLICATION**

The complete line of W. R. MEADOWS air/vapor and liquid moisture barriers are designed for each and every application. For specific questions not covered in this section, please request a data sheet or call W. R. MEADOWS technical services at 1-800-342-5976.

**AIR-SHIELD**

AIR-SHIELD self-adhering air/vapor and liquid moisture barrier is designed for a variety of uses.

Primary applications include cavity wall and masonry wall construction. AIR-SHIELD works equally well as an air and/or vapor barrier on precast concrete, cast-in-place concrete, masonry (concrete block), interior and exterior gypsum board, styrofoam, primed steel, aluminum mill finish, anodized aluminum, primed galvanized metal, drywall and plywood.

Surface Preparation ... All surfaces to be protected must be clean, dry, frost-free and smooth. Remove any sharp protrusions and repair all defects. All surfaces to receive AIR-SHIELD must be clean of oil, dust and excess



mortar. Strike masonry joints flush. Concrete surfaces must be smooth and without large voids, spalled areas or sharp protrusions. Concrete must be cured a minimum of 14 days and must be dry before AIR-SHIELD is applied. Where curing compounds are used, they must be clear resin-based, without oil, wax or pigments. Prepare substrate per manufacturer's instruction prior to application of membrane.

All surfaces to which AIR-SHIELD is to be applied must be addressed with MEL-PRIME or MEL-PRIME W/B adhesive from W. R. MEADOWS. MEL-PRIME may be applied to an area that is to be covered the same day. Uncovered areas must be re-addressed the next day. See container for complete application directions, drying information, and precautions.

**Application Method** ... AIR-SHIELD self-adhesive air/vapor and liquid moisture barrier can be applied at minimum temperatures of 40° F (4° C). Apply membrane to surface addressed with MEL-PRIME by removing release paper and rolling membrane firmly into place. Remove release paper only as membrane is being applied. Ensure membrane is fully adhered and remove all wrinkles and/or fish mouths. Cut AIR-SHIELD membrane with a utility knife to detail around protrusions and masonry reinforcing. Seal all end laps and protrusions with POINTING MASTIC from W. R. MEADOWS. Overlap subsequent courses of membrane a minimum of 2" (5.1 cm). Vertical terminations of AIR-SHIELD should either be tied into the wall system or mechanically fastened with TERMINATION BAR from W. R. MEADOWS. AIR-SHIELD is not designed for permanent exposure. Good construction practices call for application of insulation as soon as possible to protect the air barrier.

When used as a flexible wall flashing, AIR-SHIELD should be recessed ½" (13 mm) from the face of the masonry. Flashing should not be permanently



exposed to sunlight. Do not allow the rubberized asphalt surface of the flashing membrane to come in contact with sealants containing solvents, creosote, uncured coal tar products, EPDM, or PVC components.

**Surface Preparation ...** All surfaces to be protected must be clean, dry, frost-free, and smooth. Remove any sharp protrusions and repair all defects.

### **AIR-SHIELD ALUMINUM SHEET MEMBRANE**

All surfaces to receive AIR-SHIELD ALUMINUM SHEET MEMBRANE must be clean of oil, dust, and excess mortar. Strike masonry joints flush. Concrete and masonry joints should be cured at least 72 hours, be clean, dry, smooth, and free of voids. Repair spalled areas; fill all voids and remove all sharp protrusions. Concrete must be cured a minimum of 14 days and must be dry before AIR-SHIELD ALUMINUM SHEET MEMBRANE is applied. Where curing compounds are used, they must be clear resin-based, without oil, wax or pigments. Prepare substrate per manufacturer's instruction prior to application of membrane.

All surfaces to which AIR-SHIELD ALUMINUM SHEET MEMBRANE is to be applied must be addressed with MEL-PRIME™ or MEL-PRIME W/B adhesive from W. R. MEADOWS. MEL-PRIME may be applied to an area that is to be covered the same day. Uncovered areas must be re-addressed the next day. See container for complete application directions, drying information, and precautions.

**Application Method ...** AIR-SHIELD ALUMINUM SHEET MEMBRANE self-adhesive air/vapor and liquid moisture barrier can be applied at minimum temperatures of 40° F (4° C). Apply membrane to surface addressed with MEL-PRIME by removing release paper and rolling membrane firmly into place. Remove release paper only as membrane is being applied. Ensure membrane is fully adhered and remove all wrinkles and/or fish mouths. Cut AIR-SHIELD ALUMINUM



SHEET MEMBRANE with a utility knife to detail around protrusions and masonry reinforcing. Seal all end laps and protrusions with POINTING MASTIC from W. R. MEADOWS. Overlap subsequent courses of membrane a minimum of 2.5" (63.5 mm). Vertical terminations of AIR-SHIELD ALUMINUM SHEET MEMBRANE should either be tied into the wall system or mechanically fastened with TERMINATION BAR from W. R. MEADOWS. AIR-SHIELD ALUMINUM SHEET MEMBRANE is not designed for permanent exposure. Good construction practices call for application of insulation as soon as possible to protect the air barrier.

When used as a flexible wall flashing, AIRSHIELD ALUMINUM SHEET MEMBRANE should be recessed ½" (13 mm) from the face of the masonry. Flashing should not be permanently exposed to sunlight. Do not allow the rubberized asphalt surface of the flashing membrane to come in contact with sealants containing solvents, creosote, uncured coal tar products, EPDM, or PVC components. If being used with a masonry cladding, replace AIRSHIELD ALUMINUM SHEET MEMBRANE with AIR-SHIELD THRU-WALL FLASHING from W. R. MEADOWS due to the potential long term corrosion of the aluminum facer when in contact with the alkalis in the mortar.

### **AIR-SHIELD LIQUID FLASHING**

Surface Preparation ... All surfaces to receive AIR-SHIELD LIQUID FLASHING should be clean, smooth, and free from all bond-breaking contaminants. Product can be applied to damp surfaces if it is clean. Remove any damaged structural wall components. Any raw edges of exterior gypsum board may require primer. For detailed instructions, view our AIR-SHIELD LIQUID FLASHING INSTALLATION GUIDELINES document on our website.

Rough Opening ... Inspect rough opening. The rough or cut edge of gypsum board should be primed. Pre-



fill any gaps larger than  $\frac{1}{4}$ " (6.35 mm) with AIR-SHIELD LIQUID FLASHING and allow to skin over.

Apply bead of AIR-SHIELD LIQUID FLASHING in opening to be sealed. Spread the material using putty knife across rough opening surface. Next, apply a thick bead of material to the structural wall surface around rough opening. Again, spread the material evenly using a putty knife. Make sure material is spread in an even, monolithic manner. Make sure to spread the material 4" – 6" (100 – 152 mm) on to structural wall. Make sure material contains no pinholes and is void-free. Again, make sure material is even, monolithic and undamaged.

Make sure AIR-SHIELD LIQUID FLASHING covers the entire opening and seamlessly joins the specific AIR-SHIELD membrane being installed. Allow surface to dry before installing windows, doors, wall assembly, and specific AIR-SHIELD membrane being applied.

AIR-SHIELD LIQUID FLASHING is also compatible with the entire line of AIR-SHIELD products for joint detailing in exterior sheathing panels. For detailed application instructions, please view our AIR-SHIELD EXTERIOR SHEATHING PANELS INSTALLATION GUIDELINES document on our website.

### **AIR-SHIELD LM**

Surface Preparation ... All surfaces must be clean (free of all coatings and curing compounds), structurally sound and relatively smooth. Prepare substrate per manufacturer's instruction prior to application of membrane.

Thoroughly, mechanically mix AIR-SHIELD LM prior to application. AIR-SHIELD LM may be sprayed on at the minimum coverage rate indicated below. Note: For roller applications or during periods of extremely hot weather, two coats (30 mils wet) may be necessary if the material begins to slump. Apply second coat



after first coat has completely dried (approximately one to two hours) after first coat. Frequently inspect surface area with a wet mil gauge to ensure consistent thickness. Work material well into any fluted rib forming indentations. Porous masonry block walls may require additional coats to obtain desired thickness. AIR-SHIELD LM may be exposed to open air for 30 – 40 days, depending on specific weather conditions at jobsite.

#### COVERAGE

Application Rate 20 - 25 ft.<sup>2</sup>/gal. (0.49 - 0.61 m<sup>2</sup>/L)

Wet Film Thickness 60 mil

Cured Film Thickness 45 mil (1.15 mm)

Coverage dependent on substrate type, weather, and application conditions.

**Exterior Sheathing Panels ...** Exterior sheathing panels are to be installed and fastened per manufacturer's recommendation. For detailed application information, see INSTALLATION INSTRUCTIONS: JOINT TREATMENT OF EXTERIOR SHEATHING PANELS WHEN USING AIR-SHIELD FLUID APPLIED MEMBRANES available at [www.wrmeadows.com](http://www.wrmeadows.com) and later in this handbook.

**Concrete Masonry Units ...** Before applying AIR-SHIELD LM to CMU surfaces, patch all cracks, protrusions, small voids, offsets, details, irregularities and small deformities with MEADOW-PATCH 5 or MEADOW-PATCH 20 at least two hours before application.

**Curing & Drying ...** Allow material to dry at air and surface temperatures of 30° F (-1° C) or higher. Curing times will be affected by relative humidity, temperature and airflow. The following times are given for average conditions and standard thicknesses. Actual times may differ, depending on specific conditions present on job at time of application. It is recommended that AIR-SHIELD LM be allowed to air dry to a tack-free film before application of specified insulation.



Tack free film: 1 hour

Full cure: 48 hours

Cleanup ... Uncured AIR-SHIELD LM cleans up easily while wet with water. Cured material is best removed by xylene (xylol) or by mechanical means.

### **AIR-SHIELD LMP**

Surface Preparation ... All surfaces must be clean (free of all coatings and curing compounds), free of frost, structurally sound and relatively smooth. AIR-SHIELD LMP can be applied to "green" or damp concrete if there is no liquid water on the surface. Prepare substrate per manufacturer's instruction prior to membrane application.

Exterior Sheathing Panels ... Exterior sheathing panels are to be installed and fastened per manufacturer's recommendation. For detailed application information, see INSTALLATION INSTRUCTIONS: JOINT TREATMENT OF EXTERIOR SHEATHING PANELS WHEN USING AIR-SHIELD FLUID APPLIED MEMBRANES available at [www.wrmeadows.com](http://www.wrmeadows.com) or later in this handbook.

Rough Openings and Protrusions ... Refer to INSTALLATION GUIDELINES: AIR-SHIELD ROUGH OPENINGS available at [www.wrmeadows.com](http://www.wrmeadows.com) or later in this handbook.

Concrete Masonry Units ... Before applying AIR-SHIELD LMP to CMU surfaces, patch all cracks, protrusions, small voids, offsets, details, irregularities and small deformities with MEADOW-PATCH 5 or MEADOW-PATCH 20 at least two hours before application.

Appearance ... AIR-SHIELD LMP (gray) will dry gray in color. AIR-SHIELD LMP (black) appears dark gray in the container, but the dried film will be black.

Temperature/Conditions ... Apply AIR-SHIELD LMP at air and surface temperatures of 40° F and higher. Curing/drying times are dependent on air temperature,



airflow, relative humidity, substrate temperature, etc., specific to each individual application. Typical results are:

Tack-free time: 2 hours

Full cure: 48 hours

**Roller ...** AIR-SHIELD LMP can be applied directly from the container; a  $\frac{3}{4}$ " nap roller is recommended. Apply AIR-SHIELD LMP on a vertical surface, in multiple coats if necessary, to achieve a final film thickness of 60 mils wet (30 mils dry). NOTE: While the proper film thickness may be achieved with a single coat, multiple coats may be necessary if the material slumps due to temperature and/or substrate conditions. Allow each previous coat to dry (approximately one hour) prior to applying the next coat.

**Sprayer ...** AIR-SHIELD LMP should be stored and maintained at a temperature of 60° F or higher throughout the entire spray application. The product will become thick and difficult to spray at temperatures below 60° F. Note: Use of Graco HydraMax 350 or Graco GH833 is recommended for optimum performance. A Graco heavy duty texture gun with either a 0.051" (Graco GHD 551), 0.035" (Graco GHD 535), or 0.037" (Graco GHD 537) spray tip is recommended. If cratering occurs, the GHD 535 or 537 is recommended for a smoother finish.

**Spray** AIR-SHIELD LMP on a vertical surface, in multiple coats if necessary, to achieve a final film thickness of 60 mils wet (30 mils dry). NOTE: While the proper film thickness may be achieved with a single coat, multiple coats may be necessary if the material slumps due to temperature and/or substrate conditions. Allow each previous coat to dry (approximately one hour) prior to applying the next coat.

**Film Thickness ...** Frequently inspect the surface with a wet film gauge to verify that proper film thickness is





achieved, and that the film thickness is uniform over the entire surface. Porous substrates, masonry blocks, etc., may require multiple coats to achieve recommended film thickness.

#### COVERAGE

Application Rate 25 ft.<sup>2</sup>/gal. (0.6 m<sup>2</sup>/L)

Wet Film Thickness 60 mil (1.5 mm)

Cured Film Thickness 30 mil (0.8 mm)

Cleanup ... Material should not be left in the pump, lines, or gun when finished spraying. After spraying, flush water through the system until pump and hose are clear (approximately five gallons). Aromatic solvents, such as xylene or toluene (approximately two gallons) can be used for final flushing after water is flushed through the pump and lines. Water should be flushed through the machine to remove any solvent prior to spraying of AIR-SHIELD LMP.

#### AIR-SHIELD LSR

Surface Preparation ... All surfaces must be clean (free of all coatings and curing compounds), structurally sound, and relatively smooth. Prepare substrate per manufacturer's instruction prior to application of membrane.

Exterior Sheathing Panels ... Exterior sheathing panels are to be installed and fastened per manufacturer's recommendation. For detailed application information, see INSTALLATION INSTRUCTIONS: JOINT TREATMENT OF EXTERIOR SHEATHING PANELS WHEN USING AIR-SHIELD FLUID APPLIED MEMBRANES available at [www.wrmeadows.com](http://www.wrmeadows.com) or later in this handbook.

Rough Openings and Protrusions ... Refer to AIR-SHIELD ROUGH OPENINGS INSTALLATION GUIDELINES document available at [www.wrmeadows.com](http://www.wrmeadows.com) or later in this handbook for recommendations on protrusions and rough openings.



**Concrete Masonry Units ...** Before applying AIR-SHIELD LSR to CMU surfaces, patch all cracks, protrusions, small voids, offsets, details, irregularities, and small deformities with MEADOW-PATCH 5 or MEADOW-PATCH 20 from W. R. MEADOWS at least two hours before application.

**Application Method ...** AIR-SHIELD LSR may be applied by spraying or a 3/4" (19.1 mm) minimum nap roller. (For recommendations on spray equipment, consult W. R. MEADOWS technical staff.)

AIR-SHIELD LSR may be sprayed on at the minimum coverage rate of approximately 17 - 22 ft.<sup>2</sup>/gal. (0.42 - 0.54 m<sup>2</sup>/L) (80 mils wet) (40 mils dry). Note: For roller applications or during periods of extremely hot weather, two coats (40 mils wet) may be necessary if the material begins to slump. Apply second coat after first coat has completely dried, approximately one to two hours after first coat. Frequently inspect surface area with a wet mil gauge to ensure consistent thickness. Work material well into any fluted rib forming indentations. Porous masonry block walls may require additional coats to obtain desired thickness.

**Curing and Drying ...** Allow material to dry at air and surface temperatures of 40° F (4° C) or higher. Curing times will be affected by relative humidity, temperature and airflow. The following times are given for average conditions and standard thicknesses. Actual times may differ, depending on specific conditions present on job at time of application. It is recommended that AIR-SHIELD LSR be allowed to air dry to a tack-free film before application of specified insulation. Maximum exposure time for AIR-SHIELD LSR is four months.

Tack-free film: 2 hours

Full cure: 48 hours.

**Cleanup ...** Uncured AIR-SHIELD LSR cleans up easily



## Air Barriers

while wet with water. Cured material is best removed by xylene or by mechanical means.

### **AIR-SHIELD TMP**

**Surface Preparation ...** All surfaces must be clean (free of all coatings and curing compounds), free of frost, structurally sound, and relatively smooth. Prepare substrate per manufacturer's instruction prior to membrane application.

**Exterior Sheathing Panels ...** Exterior sheathing panels are to be installed and fastened per manufacturer's recommendation. For detailed application information, see **INSTALLATION INSTRUCTIONS: JOINT TREATMENT OF EXTERIOR SHEATHING PANELS WHEN USING AIR-SHIELD FLUID APPLIED MEMBRANES** available at [www.wrmeadows.com](http://www.wrmeadows.com) or later in this handbook.

**Rough Openings and Protrusions ...** Refer to application details at [wrmeadows.com](http://www.wrmeadows.com) or later in this handbook for recommendations on protrusions and rough openings.

**Concrete Masonry Units ...** Before applying AIR-SHIELD TMP to CMU surfaces, patch all cracks, protrusions, small voids, offsets, details, irregularities, and small deformities with MEADOW-PATCH 5 or MEADOW-PATCH 20 at least two hours before application. All mortar joints should be full and struck flush with the face of the CMU.

**Temperature/Conditions ...** Apply AIR-SHIELD TMP at air and surface temperatures of 35° F (1.7° C) and higher. Curing/drying times are dependent on air temperature, airflow, relative humidity, substrate temperature, etc., specific to each individual application. Typical results are:

Tack-Free Time: 2 hours  
Full Cure: 48 hours

**Roller ...** AIR-SHIELD TMP can be applied directly from the container; a ¾" (19.1 mm) nap roller is recom-



mended. Apply AIR-SHIELD TMP on a vertical surface, in multiple coats if necessary, to achieve a final film thickness of 10 mils wet (6 mils dry). NOTE: While the proper film thickness may be achieved with a single coat, multiple coats may be necessary if the material slumps due to temperature and/or substrate conditions. Allow each previous coat to dry (approximately one hour) prior to applying the next coat.

Sprayer ... AIR-SHIELD TMP should be stored and maintained at a temperature of 40° F (4.4° C) or higher throughout the entire spray application. The product will become thick and difficult to spray at temperatures below 60° F (15.6° C). Note: Use of Graco HydraMax 350 or Graco GH833 is recommended for optimum performance. A Graco heavy duty texture gun with either a 0.051" (Graco GHD 551), 0.035" (Graco GHD 535), or 0.037" (Graco GHD 537) spray tip is recommended. If cratering occurs, the GHD 535 or 537 is recommended for a smoother finish. Spray AIR-SHIELD TMP on a vertical surface, in multiple coats if necessary, to achieve a final film thickness of 10 mils wet (6 mils dry). NOTE: While the proper film thickness may be achieved with a single coat, multiple coats may be necessary if the material slumps due to temperature and/or substrate conditions. Allow each previous coat to dry (approximately one hour) prior to applying the next coat. Porous substrates, masonry blocks, etc., may require multiple coats to achieve recommended film thickness.

#### COVERAGE

Plywood (2.45m <sup>2</sup> /L)	100 ft. <sup>2</sup> /gal.
Exterior Gypsum Sheathing m <sup>2</sup> /L)	100 ft. <sup>2</sup> /gal. (2.45
Wet Film Thickness	10 Mils
Cured Film Thickness	6 Mils
CMU Substrate	60 ft. <sup>2</sup> /gal. (1.47

## Air Barriers



m<sup>2</sup>/L)

Wet Film Thickness 20 Mils

Cured Film Thickness 12 Mils

Coverage dependent on substrate type, weather, and application conditions.

Cleanup ... Material should not be left in the pump, lines, or gun when finished spraying. After spraying, flush water through the system until pump and hose are clear (approximately five gallons). Aromatic solvents, such as xylene or toluene (approximately two gallons), can be used for final flushing after water is flushed through the pump and lines. Water should be flushed through the machine to remove any solvent prior to spraying of AIR-SHIELD TMP.

### **AIR-SHIELD SMP**

Refer to AIR-SHIELD SMP Installation Guidelines for complete installation instructions.

Surface Preparation ... All surfaces to be protected must be clean, dry, frost-free, and smooth. Remove any sharp protrusions and repair all defects. All surfaces to receive AIR-SHIELD must be clean of oil, dust, and excess mortar. Strike masonry joints flush. Concrete surfaces must be smooth and without large voids, spalled areas, or sharp protrusions. Concrete must be cured a minimum of 14 days and must be dry before AIR-SHIELD is applied. Where curing compounds are used, they must be clear resin-based, without oil, wax or pigments. Prepare substrate per manufacturer's instruction prior to application of membrane.

Application Method ... AIR-SHIELD SMP should be installed with a hand roller and stiff brush to create a continuous and effective bond with the substrate. Always install with an overlap, with the upper courses lapped over lower courses, in a shingle fashion. All horizontal and vertical overlaps should be a minimum of 2 ½" (63.5 mm).



AIR-SHIELD SMP can be applied at minimum air and surface temperatures of 32° F (0° C) and rising. Pre-cut material to required length. Apply membrane to surface by removing release paper and rolling membrane firmly into place. Remove release paper only as membrane is being applied. Using a hand roller or stiff brush, roll press the membrane into place to ensure full adhesion to the substrate. Remove all wrinkles and/or fish mouths. Overlap subsequent courses of membrane a minimum of 2 ½" (63.5 mm). Cut AIR-SHIELD membrane with a utility knife to detail around protrusions and masonry reinforcing. Seal all membrane terminations, penetrations, and protrusions with AIR-SHIELD LIQUID FLASHING.

At the end of each working day, protect the leading edge of AIR-SHIELD SMP with a bead of AIRSHIELD LIQUID FLASHING.

Rough Openings and Penetrations ... AIR-SHIELD SMP can be used for detailing of rough openings and is to be installed in accordance with AIR-SHIELD SMP Installation Guidelines and W. R. MEADOWS published details. Alternatively, AIR-SHIELD LIQUID FLASHING can be used.





## INSTALLATION INSTRUCTIONS FOR JOINT TREATMENT OF EXTERIOR SHEATHING PANELS WHEN USING **AIR-SHIELD<sup>®</sup> LM**

This document has been created as an addendum to our AIR-SHIELD technical data-sheets to provide information regarding the recommended treatment of joints in exterior sheathing panels (drywall and glass-faced) when using AIR-SHIELD LM fluid-applied membrane.

Following are the typical installation instructions recommended by W. R. MEADOWS. However, it is important to review each application as there may be situations that may require this procedure to be modified based on the project requirements. If this situation arises, please contact W. R. MEADOWS Technical Services.

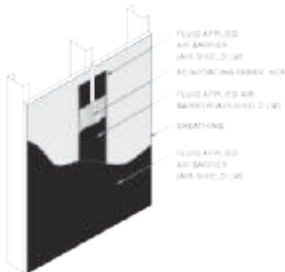
### INSTALLATION INSTRUCTIONS EXTERIOR SHEATHING PANELS

1. Install and fasten exterior sheathing panels according to the sheathing manufacturer's instructions.
2. When installing the fasteners, ensure that they are driven flush with the surface (not countersunk) and into the framing. Any fasteners that are countersunk, or any holes from the removal of a fastener, must be pre-treated with AIR-SHIELD LIQUID FLASHING from W. R. MEADOWS prior to application of the applicable fluid-applied membrane.
3. Inspect the joint to ensure that all areas to receive joint treatment are clean, dry, smooth, and free from all bond breaking contaminants.
4. Remove and replace any damaged structural wall components.



### JOINT TREATMENT USING AIR-SHIELD LM FLUID-APPLIED MEMBRANE

1. Fill joint area with the applicable fluid-applied membrane using a W. R. MEADOWS SPREADER TOOL or a 3" (76.2 mm) putty knife. A standard 3" (76.2 mm) roller can be used to apply the applicable fluid-applied membrane.
2. Extend the fluid-applied membrane beyond the joint line 3" (76.2 mm) onto face of exterior sheathing either side of center.
3. Fully embed REINFORCING FABRIC HCR from W. R. MEADOWS 3" (76.2 mm) wide into the wet fluid-applied membrane centered over the joint.
4. Run the SPREADER TOOL or putty knife over the embedded REINFORCING FABRIC HCR to remove any air bubbles.



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# Exterior Sheathing Panels

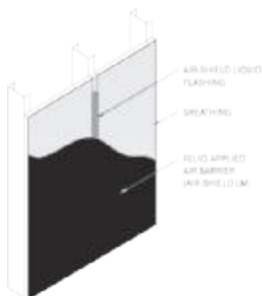




## INSTALLATION INSTRUCTIONS FOR JOINT TREATMENT OF EXTERIOR SHEATHING PANELS WHEN USING **AIR-SHIELD<sup>LM</sup>**

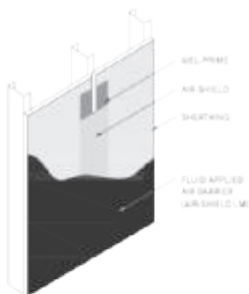
### JOINT TREATMENT USING AIR-SHIELD LIQUID FLASHING

1. Fill joint with AIR-SHIELD LIQUID FLASHING and create a 1" (25.4 mm) band over the joint area.
2. Do not strike flush with the sheathing surface.



### JOINT TREATMENT USING AIR-SHIELD SELF-ADHESIVE MEMBRANE

1. Apply MEL PRIME<sup>LM</sup> on either side of the joint extending 3" (76.2 mm) from the center.
2. Install a 4" (25.4 mm) strip of AIR-SHIELD centered over the joint and roll press firmly into place. For joints widths greater than 1/2" (6.4 mm), fill with BEM from W. R. MEADOWS prior to application of AIR-SHIELD.



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# Exterior Sheathing Panels

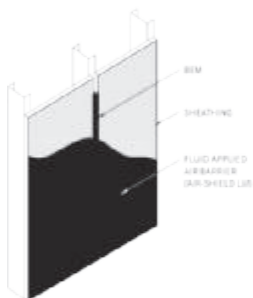




## INSTALLATION INSTRUCTIONS FOR JOINT TREATMENT OF EXTERIOR SHEATHING PANELS WHEN USING **AIR-SHIELD<sup>LM</sup>**

### JOINT TREATMENT USING BEM

1. Fill joint with BEM and create a 1" (25.4 mm) band over the joint area.
2. Do not strike flush with the sheathing surface.



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# Exterior Sheathing Panels





## INSTALLATION INSTRUCTIONS FOR JOINT TREATMENT OF EXTERIOR SHEATHING PANELS WHEN USING AIR-SHIELD LMP FLUID-APPLIED MEMBRANE

This document has been created as an addendum to our AIR-SHIELD technical data sheets to provide information regarding the recommended treatment of joints in exterior sheathing panels (drywall and glass-faced) when using AIR-SHIELD LMP fluid-applied membrane.

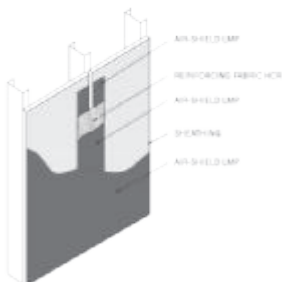
Following are the typical installation instructions recommended by W. R. MEADOWS. However, it is important to review each application as there may be situations that may require this procedure to be modified based on the project requirements. If this situation arises, please contact W. R. MEADOWS Technical Service.

### INSTALLATION INSTRUCTIONS EXTERIOR SHEATHING PANELS

1. Install and fasten exterior sheathing panels according to the sheathing manufacturer's instructions.
2. When installing the fasteners, ensure that they are driven flush with the surface (not countersunk) and into the framing. Any fasteners that are countersunk, or any holes from the removal of a fastener, must be pre-treated with AIR-SHIELD LIQUID FLASHING prior to application of AIR-SHIELD LMP.
3. Inspect the joint to ensure that all areas to receive joint treatment are clean, dry, smooth, and free from all bond-breaking contaminants.
4. Remove and replace any damaged structural wall components.

### JOINT TREATMENT USING AIR-SHIELD LMP FLUID-APPLIED MEMBRANE

1. Fill joint area with AIR-SHIELD LMP using a W. R. MEADOWS SPREADER TOOL or a 3" (76.2 mm) putty knife. A standard 3" (76.2 mm) roller can be used to apply AIR-SHIELD LMP.
2. Extend AIR-SHIELD LMP beyond the joint line 3" (76.2 mm) onto face of exterior sheathing.
3. Fully embed REINFORCING FABRIC HCR from W. R. MEADOWS 3" (76.2 mm) wide into wet AIR-SHIELD LMP centered over the joint.
4. Run the SPREADER TOOL or putty knife over the embedded REINFORCING FABRIC HCR to remove any air bubbles.



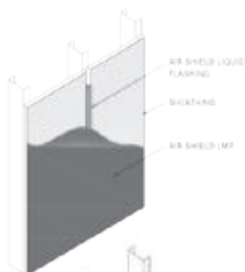
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# AIR-SHIELD LMP

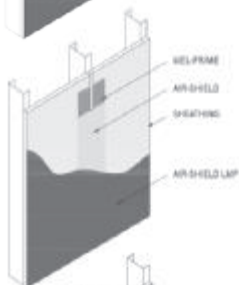
### JOINT TREATMENT USING AIR-SHIELD LIQUID FLASHING

1. Fill joint with AIR-SHIELD LIQUID FLASHING and create a 1" (25.4 mm) band over the joint area.
2. Do not strike flush with the sheathing surface.



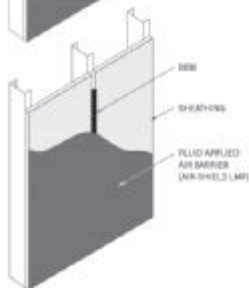
### JOINT TREATMENT USING AIR-SHIELD SELF-ADHESIVE MEMBRANE

1. Apply MEL-PRIME from W. R. MEADOWS on either side of the joint, extending 3" (76.2 mm) from the center.
2. Install a 4" (25.4 mm) strip of AIR-SHIELD centered over the joint and roll press firmly into place. For joint widths greater than 1/4" (6.4 mm), fill with BEM from W. R. MEADOWS prior to application of AIR-SHIELD.



### JOINT TREATMENT USING BEM

1. Fill joint with BEM and create a 1" (25.4 mm) band over the joint area.
2. Do not strike flush with the sheathing surface.



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# AIR-SHIELD LMP





## INSTALLATION INSTRUCTIONS FOR JOINT TREATMENT OF EXTERIOR SHEATHING PANELS WHEN USING AIR-SHIELD™ TMP FLUID-APPLIED MEMBRANE

This document has been created as an addendum to our AIR-SHIELD technical data sheets to provide information regarding the recommended treatment of joints in exterior sheathing panels (drywall and glass-faced) when using AIR-SHIELD TMP fluid applied membrane.

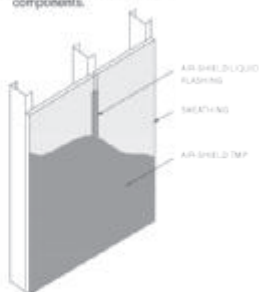
Following are the typical installation instructions recommended by W. R. MEADOWS. However, it is important to review each application as there may be situations that may require this procedure to be modified based on the project requirements. If this situation arises, please contact W. R. MEADOWS Technical Service.

### JOINT TREATMENT USING AIR-SHIELD LIQUID FLASHING

1. Fill joint with AIR-SHIELD LIQUID FLASHING and create a 1" (25.4 mm) band over the joint area.
2. Do not strike flush with the sheathing surface.

### INSTALLATION INSTRUCTIONS EXTERIOR SHEATHING PANELS

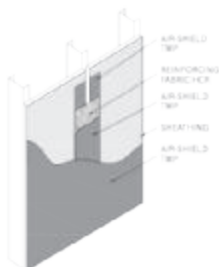
1. Install and fasten exterior sheathing panels according to the sheathing manufacturer's instructions.
2. When installing the fasteners, ensure that they are driven flush with the surface (not countersunk) and into the framing. Any fasteners that are countersunk, or any holes from the removal of a fastener, must be pre-treated with AIR-SHIELD LIQUID FLASHING prior to application of AIR-SHIELD TMP.
3. Inspect the joint to ensure that all areas to receive joint treatment are clean, dry, smooth, and free from all bond breaking contaminants.
4. Remove and replace any damaged structural wall components.



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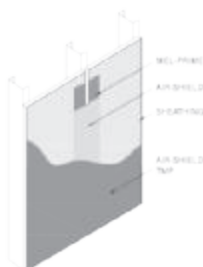


# AIR-SHIELD TMP



#### JOINT TREATMENT USING AIR-SHIELD TMP FLUID-APPLIED MEMBRANE

1. Fill joint area with AIR-SHIELD TMP using a W. R. MEADOWS SPREADER TOOL or a 3" (76.2 mm) putty knife. A standard 3" (76.2 mm) roller can also be used to apply AIR-SHIELD TMP.
2. Extend AIR-SHIELD TMP beyond the joint line 3" (76.2 mm) onto face of exterior sheathing, either side of center.
3. Fully embed REINFORCING FABRIC HCR from W. R. MEADOWS 3" (76.2 mm) wide into the wet AIR-SHIELD TMP centered over the joint.
4. Run the W. R. MEADOWS SPREADER TOOL or putty knife over the embedded REINFORCING FABRIC HCR to remove any air bubbles.



#### JOINT TREATMENT USING AIR-SHIELD SELF-ADHESIVE MEMBRANE

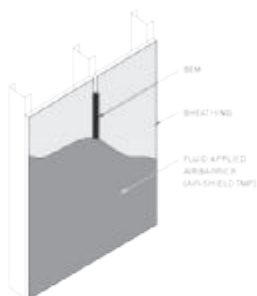
1. Apply MEL-PRIME, on either side of the joint extending 3" (76.2 mm) from the center.
2. Install a 4" (25.4 mm) strip of AIR-SHIELD centered over the joint and roll press firmly into place. For joints less than 1/4" (6.4 mm), fill with BEM from W. R. MEADOWS prior to application of AIR-SHIELD.



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# AIR-SHIELD TMP





#### JOINT TREATMENT USING BEM

1. Fill joint with BEM and create a 1" (25.4 mm) band over the joint area.
2. Do not strike flush with the sheathing surface.



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## AIR-SHIELD TMP



## INSTALLATION INSTRUCTIONS AIR-SHIELD® LIQUID FLASHING

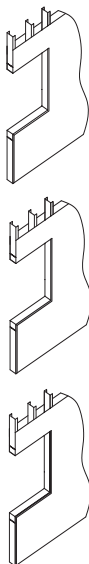
**AIR SHIELD LIQUID FLASHING** is high-quality, gun-grade, low-odor, elastomeric, polyether liquid-applied flashing and detailing membrane that is compatible with the entire line of AIR-SHIELD air, vapor, and liquid moisture barriers. This general-purpose, wet flashing membrane is used to seal rough openings and detail joints and bonds to most construction materials, such as aluminum, brick, concrete, wood, and vinyl and exterior gypsum board.

This document has been created as an addendum to our AIR-SHIELD technical data sheets to provide information regarding the application of AIR SHIELD LIQUID FLASHING for rough openings, such as windows and doors. Following are the typical installation instructions recommended by W. R. MEADOWS. It is important to review each application as there may be situations that may require this procedure to be modified based on the project requirements. If this situation arises, please contact W. R. MEADOWS Technical Service.



### INSTALLATION INSTRUCTIONS

1. Inspect rough opening and ensure that all areas to receive AIR-SHIELD LIQUID FLASHING are clean, dry, smooth, and free from all bond-breaking contaminants.
2. Remove and replace any damaged structural wall components.
3. Apply a coat of MEL-PRIME<sub>®</sub> on the raw edges of exterior gypsum board.
4. Prefill any joints or cracks that are larger than 1/4" (6.35 mm) and less than 1/2" (12.7 mm) with AIR-SHIELD LIQUID FLASHING. Apply a generous bead of material over the joint, press, and spread into the joint. Allow material to skin over prior to full application of AIR-SHIELD LIQUID FLASHING.
5. Prefill any joints or cracks larger than 1/2" (12.7 mm) with AIR-SHIELD LIQUID FLASHING. Install KOOL-ROD<sub>®</sub> into the joint to control sealant depth and apply AIR-SHIELD LIQUID FLASHING. Smooth out using a W. R. MEADOWS SPREADER TOOL or putty knife and allow to cure prior to full application of AIR-SHIELD LIQUID FLASHING.



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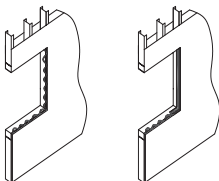
# AIR-SHIELD LIQUID FLASHING



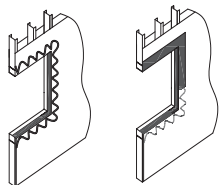


## INSTALLATION INSTRUCTIONS AIR-SHIELD® LIQUID FLASHING

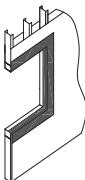
6. Starting at the top of the rough opening, apply a bead of AIR-SHIELD LIQUID FLASHING in the rough opening to be sealed and spread the material using a W. R. MEADOWS SPREADER TOOL or putty knife across the rough opening surface at an even consistency. Test the thickness of the material and ensure that it has a thickness of 12-15 mils using a wet mil gauge.



7. Apply a generous bead of AIR-SHIELD LIQUID FLASHING to the vertical surface around the rough opening and spread this material with a W. R. MEADOWS SPREADER TOOL or putty knife in an even, monolithic manner 4" - 6" (100 - 152 mm) onto the vertical surface around the rough opening. Make sure material contains no pinholes and is void-free. Again, make sure material is even, monolithic, and undamaged. Test the thickness to ensure the material has a thickness of 12-15 mils.



8. Allow AIR-SHIELD LIQUID FLASHING to dry before installing windows, doors, wall assembly, and the specific AIR-SHIELD membrane being applied.



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# AIR-SHIELD LIQUID FLASHING





## INSTALLATION INSTRUCTIONS FOR JOINT TREATMENT OF EXTERIOR SHEATHING PANELS WHEN USING AIR-SHIELD LSR FLUID-APPLIED MEMBRANE

This document has been created as an addendum to our AIR-SHIELD technical data sheets to provide information regarding the recommended treatment of joints in exterior sheathing panels (drywall and glass-faced) when using AIR-SHIELD LSR fluid-applied membrane.

Following are the typical installation instructions recommended by W. R. MEADOWS. However, it is important to review each application as there may be situations that may require this procedure to be modified based on the project requirements. If this situation arises, please contact W. R. MEADOWS Technical Service.

### JOINT TREATMENT USING AIR-SHIELD LIQUID FLASHING

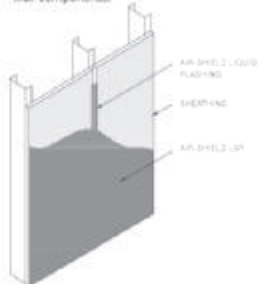
1. Fill joint with AIR-SHIELD LIQUID FLASHING and create a T (25.4 mm) band over the joint area.
2. Do not strike flush with the sheathing surface.



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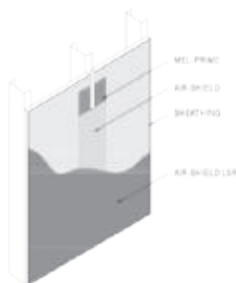
### INSTALLATION INSTRUCTIONS EXTERIOR SHEATHING PANELS

1. Install and fasten exterior sheathing panels according to the sheathing manufacturer's instructions.
2. When installing the fasteners, ensure that they are driven flush with the surface (not countersunk) and into the framing. Any fasteners that are countersunk, or any holes from the removal of a fastener, must be pre-treated with AIR-SHIELD LIQUID FLASHING prior to application of AIR-SHIELD LSR.
3. Inspect the joint to ensure that all areas to receive joint treatment are clean, dry, smooth, and free from all bond-breaking contaminants.
4. Remove and replace any damaged structural wall components.



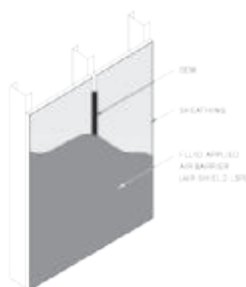
# AIR-SHIELD LSR Spraying Info





#### JOINT TREATMENT USING USING AIR-SHIELD SELF-ADHESIVE MEMBRANE

1. Apply MEL-PRIME from W. R. MEADOWS on either side of the joint, extending 3" (76.2 mm) from the center.
2. Install a 4" (25.4 mm) strip of AIR-SHIELD centered over the joint and roll press firmly into place. For joint widths greater than 1/4" (6.4 mm), fill with BEM from W. R. MEADOWS prior to application of AIR-SHIELD.



#### JOINT TREATMENT USING BEM

1. Fill joint with BEM and create a 1" (25.4 mm) band over the joint area.
2. Do not strike flush with the sheathing surface.



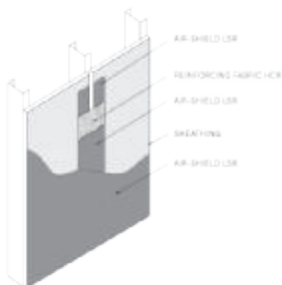
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## AIR-SHIELD LSR Spraying Info

**JOINT TREATMENT USING AIR-SHIELD LSR  
FLUID-APPLIED MEMBRANE**

1. Fill joint area with AIR-SHIELD LSR using a W. R. MEADOWS SPREADER TOOL or a 3" (76.2 mm) putty knife. A standard 3" (76.2 mm) roller can be used to apply AIR-SHIELD LSR.
2. Extend AIR-SHIELD LSR beyond the joint line 3" (76.2 mm) onto face of exterior sheathing.
3. Fully embed REINFORCING FABRIC HCR from W. R. MEADOWS 3" (76.2 mm) wide into wet AIR-SHIELD LSR contained over the joint.
4. Run the SPREADER TOOL or putty knife over the embedded REINFORCING FABRIC HCR to remove any air bubbles.



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02/09/11

# AIR-SHIELD LSR Spraying Info





## INSTALLATION GUIDELINES AIR-SHIELD™ ROUGH OPENING

This document has been created as an addendum to our AIR-SHIELD technical data sheets to provide some additional information regarding the application of transition membranes for rough openings, such as windows and doors.

To remain current in the industry and provide our customers with an economical and user friendly air barrier assembly, we would like to provide various application procedures to address the use of transition membranes. W. R. MEADOWS currently recommends three different procedures for detailing of rough openings. The first is the use of our AIR-SHIELD self-adhesive membrane as we have always used; second is the use of our fluid-applied air barrier materials, AIR-SHIELD LMP, AIR-SHIELD TMP, and AIR-SHIELD LSR; and third, use of our AIR-SHIELD LIQUID FLASHING. All of these materials are suitable for various substrates including concrete, concrete masonry, exterior gypsum sheathing and metal surfaces.

For wood substrates such as OSB and plywood, the only recommended detailing procedure for rough openings is the use of AIR-SHIELD self-adhesive membrane.

Apply the specified air barrier membrane system on the whole wall ensuring adequate overlap with the transition membrane. It is important to review each application as there may be situations that would require either of these procedures to be modified based on the project requirements. Following are the procedures that we would recommend to achieve continuity of the transition membrane.

**NOTE:** AIR-SHIELD LM and AIR-SHIELD LM (ALL SEASON) are not recommended to be used as a fluid-applied transition membrane for rough openings.

### AIR-SHIELD

#### SELF-ADHESIVE TRANSITION MEMBRANE:

- Prime the area to be detailed using MEL PRIMER, or MEL PRIMER W/B. On exterior sheathing surfaces, ensure that enough primer has been applied as typically two coats of primer are required.
- Pre-cut the AIR-SHIELD for each area of the rough opening to ensure ease of handling.
- Apply the first pre-cut strip at the base of the rough opening by removing the release paper and rolling firmly into place, ensuring that there is a minimum of 3" (76.2 mm) of membrane extending onto the wall. Also, ensure that there is a minimum of 3" (76.2 mm) of membrane extending into the rough opening.
- Repeat this procedure for the vertical areas of the rough opening and finally apply the membrane at the header portion of the opening.
- Ensure all edge overlaps are a minimum of 2" (50.8 mm) and end-to-end overlaps are 4" (101.6 mm).
- Seal all terminations with POINTING MASTIC, or appropriate liquid air barrier membrane (AIR-SHIELD LMP, AIR-SHIELD LSR, AIR-SHIELD LM).

### FLUID-APPLIED TRANSITION MEMBRANE

(to be used with AIR-SHIELD LMP, AIR-SHIELD LSR and AIR-SHIELD TMP)

- If applying this system on exterior sheathing, ensure that any joints or gaps 1/4" (6.4 mm) or greater are initially filled with AIR-SHIELD LIQUID FLASHING or BEM prior to proceeding.
- Apply an initial wet coat of applicable fluid-applied AIR-SHIELD product at the recommended wet mil thickness\*, ensuring a minimum of 3" (76.2 mm) of membrane extending onto the wall. Also, ensure that there is a minimum of 3" (76.2 mm) of membrane extending into the rough opening.



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# Rough Opening





## INSTALLATION GUIDELINES AIR-SHIELD<sub>®</sub> ROUGH OPENING

\*Please note: **AIR-SHIELD TMP** is required to be applied at a minimum 15 wet mils for each coat to ensure full embedment of the **REINFORCING FABRIC HCR**.

- Embed a layer of **REINFORCING FABRIC HCR** into this initial first coat.
- While the first coat is still wet, completely cover **REINFORCING FABRIC HCR** with a second coat of applicable product at the recommended wet mil thickness, again extending 3" (76.2 mm) onto the wall and 3" (76.2 mm) into the rough opening. This will allow for maximum adhesion of the two coats. Again, please note that applicable coat thickness is 30 mils for **AIR-SHIELD LMP**, 15 mils for **AIR-SHIELD TMP**.

\*Please note: **AIR-SHIELD TMP** is required to be applied at a minimum 15 wet mils for each coat to ensure full embedment of the **REINFORCING FABRIC HCR**.

	Completed wet mil thickness (2 coats)	Dry mil thickness (2 coats)
<b>AIR-SHIELD LMP</b>	60 mils	30 mils
<b>AIR-SHIELD LSR</b>	75 mils	40 mils
<b>AIR-SHIELD TMP</b>	30 mils	15 mils

- If the substrate is concrete or concrete masonry, **REINFORCING FABRIC HCR** is not required. Apply product in one or two coats in order to achieve the recommended wet and dry mil thicknesses.

**NOTE:** **AIR-SHIELD LM** and **AIR-SHIELD LM (ALL SEASON)** are not recommended to be used as a fluid-applied transition membrane for rough openings.

### AIR-SHIELD LIQUID FLASHING

**AIR-SHIELD LIQUID FLASHING** is high-quality, gun-grade, low-odor, elastomeric, polyether liquid-applied flashing and detailing membrane that is compatible with the entire line of **AIR-SHIELD** air, vapor, and liquid moisture barriers. This general purpose, wet flashing membrane is used to seal rough openings and detail joints and bonds to most construction materials, such as aluminum, brick, concrete, wood, and vinyl and exterior gypsum board.

1. Inspect rough opening and ensure that all areas to receive **AIR-SHIELD LIQUID FLASHING** are clean, dry, smooth, and free from all bond-breaking contaminants.
2. Remove and replace any damaged structural wall components.



3. Apply a coat of **MEL-PRIME** on the raw edges of exterior gypsum board.



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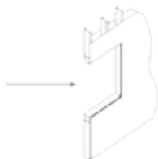
# Rough Opening





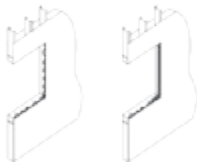
## INSTALLATION GUIDELINES AIR-SHIELD™ ROUGH OPENING

4. Prefill any joints or cracks that are larger than  $\frac{1}{8}$ " (6.35 mm) and less than  $\frac{1}{2}$ " (12.7 mm) with **AIR-SHIELD LIQUID FLASHING**. Apply a generous bead of material over the joint, press, and spread into the joint. Allow material to skin over prior to full application of **AIR-SHIELD LIQUID FLASHING**.

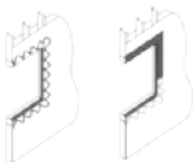


5. Prefill any joints or cracks larger than  $\frac{1}{2}$ " (12.7 mm) with **AIR-SHIELD LIQUID FLASHING**. Install **KOOL-ROD** into the joint to control sealant depth and apply **AIR-SHIELD LIQUID FLASHING**. Smooth out using a **W. R. MEADOWS SPREADER TOOL** or putty knife and allow to cure prior to full application of **AIR-SHIELD LIQUID FLASHING**.

6. Starting at the top of the rough opening, apply a bead of **AIR-SHIELD LIQUID FLASHING** in the rough opening to be sealed and spread the material using a **W. R. MEADOWS SPREADER TOOL** or putty knife across the rough opening surface at an even consistency. Test the thickness of the material and ensure that it has a thickness of 12-15 mils using a wet mil gauge.



7. Apply a generous bead of **AIR-SHIELD LIQUID FLASHING** to the vertical surface around the rough opening and spread this material with a **W. R. MEADOWS SPREADER TOOL** or putty knife in an even, monolithic manner  $4" \times 6"$  (100 x 152 mm) onto the vertical surface around the rough opening. Make sure material contains no pinholes and is void-free. Again, make sure material is even, monolithic, and undamaged. Test the thickness to ensure the material has a thickness of 12-15 mils.



8. Allow **AIR-SHIELD LIQUID FLASHING** to dry before installing windows, doors, wall assembly, and the specific **AIR-SHIELD** membrane being applied.



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# Rough Opening



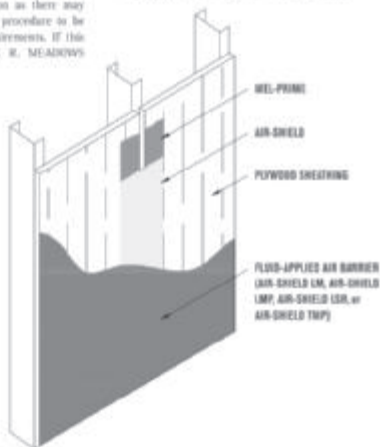


## PLYWOOD SHEATHING JOINT DETAIL INSTALLATION GUIDELINES

This document has been created as an addendum to our **AIR-SHIELD**™ technical data sheets to provide information regarding the recommended treatment of joints in plywood sheathing when using the **AIR-SHIELD** fluid-applied membranes. These include **AIR-SHIELD LM**, **AIR-SHIELD LM (ALL SEASONS)**, **AIR-SHIELD LMP**, **AIR-SHIELD TMP**, and **AIR-SHIELD LSR**.

Following is the typical installation instructions recommended by W. R. MEADOWS. However, it is important to review each application as there may be situations that may require this procedure to be modified based on the project requirements. If this situation arises, please contact W. R. MEADOWS Technical Service.

1. Fasten boards according to instruction according to board manufacturer.
2. Prime either side of the joint with **MEL-PRIME**™ 5" (76.2 mm) either side of center.
3. Apply a 4" (101.6 mm) strip of **AIR-SHIELD** centered over the joint and roll firmly into place. For joints wider than 1/8" (3.18 mm), fill with **BEEM** from W. R. MEADOWS prior to application of **AIR-SHIELD**.



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# Plywood Sheathing Joint Detail





## INSTALLATION INSTRUCTIONS SPRAYER EQUIPMENT GUIDELINES FOR W. R. MEADOWS FLUID-APPLIED MEMBRANES

Extensive field testing has shown that the Graco GH 833 Big Rig or Hydra Max 350 (now obsolete) sprayers work best for spraying of the water-based AIR-SHIELD<sup>™</sup> LM, AIR-SHIELD LMP, AIR-SHIELD LSR, AIR-SHIELD TMP, and MEL-ROL<sup>®</sup> LM products. (These sprayers also work well for the spraying of the solvent-based, ALL SEASON versions of these products.) We are not aware of any other types of sprayers being used successfully with our products. Initially, we had used the Gmax 7900 Roof Rig, but we have found that the pressures (4000 psi) attained by the Graco GH 833 Big Rig and Hydra Max 350 units yield more consistent, trouble-free results. The Graco GH 833 Big Rig and Hydra Max 350 units are capable of a 3.5 – 4.0 gal./min. output, compared to a 2.1 gal./min. for the Gmax 7900 Roof Rig. The water-based emulsion products are extremely shear sensitive and should NOT be applied through gear-type pumps or pressurized follower plate systems. These systems will cause the emulsions to break, which will then clog the equipment. The ALL SEASON versions of the products are not shear sensitive and will remain stable when applied by most standard spray equipment.

The Graco GH 833 Big Rig unit comes equipped with 100' of hose, a texture spray gun, and several tips. NOTE: The standpipe on the sprayer MUST be opened and checked for the presence of a filter element and plastic sleeve. For AIR-SHIELD LM and MEL-ROL LM, these MUST BOTH be removed prior to use, as they will cause clogging.

Both the Graco GH 833 Big Rig and Hydra Max 350 can be used for five-gal. pails or 55-gal. drums. Extensions on the pumps are able to create enough suction to allow material to be pulled from the top of a standing drum (or tote) of product. (An option available for the Graco GH 833 Big Rig allows the pump to be placed directly over a drum for improved pumping of thicker materials in cooler weather.)

**GRACO HYDRA MAX 350**



**GRACO GH 833 BIG RIG**



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# Sprayer Information







## INSTALLATION INSTRUCTIONS SPRAYER EQUIPMENT GUIDELINES FOR W. R. MEADOWS FLUID-APPLIED MEMBRANES

### EQUIPMENT

**HOSE:** We have used up to 100' of hose with these products. (Longer lengths may work; possibly up to 150'.) The hose must be rated for use up to 4000 psi for these units. W. R. MEADOWS recommends using separate hoses specific to each material.

**SPRAY GUN:** The Graco heavy duty texture gun is required (part #241705). It does not contain a paint filter and works well for these products. Other Graco guns have not worked, as they contain a diverter pin in the spray nozzle that will constantly clog the gun.

**SPRAY TIPS:** We have used the 0.051" (Graco 551,651) tip successfully for spraying and this is our preferred tip size for MEL-ROL LM/AIR-SHIELD LM products. For spraying of AIR-SHIELD LMP, AIR-SHIELD TMP, and AIR-SHIELD LSR, the 0.051" tip will work, but using the 0.035" or 0.037" tip will yield a smoother finish on the wall. For spraying of a solvent-based ALL SEASON products, we recommend using the 0.035" (Graco 535, 635) tip. NOTE: Tips should be the "reversible" type for easy clean out.

### APPLICATION - PRIMER

**PRIMING:** Priming of poured concrete substrates may be required to minimize the potential for blistering of the membrane after it is applied and when exposed to direct sunlight. Once applied, the primer coat should be allowed to dry and be allowed to "warm up" while exposed to direct sunlight. Allowing the primer to be exposed to direct sunlight prior to the membrane application will allow the surface to "warm up" (due to the black color) and help "de-gas" the surface. This "de-gassing" releases the air/moisture vapors in the pores of the substrate, allowing them to expand and dissipate prior to the membrane application. If the primer is not exposed to direct sunlight for a sufficient time interval prior to membrane application, then blistering of the membrane may occur.



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### PRIMER DILUTION / APPLICATION

**RATE:** Dilute the water-based LM products 4-5 parts product to one part water. Apply at 100-150 ft.<sup>2</sup>/gal. and allow to dry approximately one hour. The solvent-based ALL SEASON products do not need to be diluted and should also be applied at 100-150 ft.<sup>2</sup>/gal. AIR-SHIELD LMP, AIR-SHIELD LSR, and AIR-SHIELD TMP typically do not require a prime coat.

### APPLICATION - MEMBRANE

**SPRAY:** Several coats may be required to obtain the recommended thickness without excessive running or slumping of the wet membrane in hot weather. Allow the first coat to dry approximately one hour before application of the second coat.

**NOTE:** MEL-ROL LM and AIR-SHIELD LM can be sprayed easily when the material temperature is 40° F or above.

The material temperature of AIR-SHIELD LMP, AIR-SHIELD LSR, and AIR-SHIELD TMP should be 40° F or above to be successfully sprayed; AIR-SHIELD LM (ALL SEASON) and MEL-ROL LM (ALL SEASON) can be applied below 40° F.

Filter is recommended for use in applications of AIR-SHIELD LMP, AIR-SHIELD LSR, and AIR-SHIELD TMP. The filter is not needed for applications of AIR-SHIELD LM, AIR-SHIELD LM (ALL SEASON), MEL-ROL LM, and MEL-ROL LM (ALL SEASON).

**ROLLER:** Material can be roller applied if a ¾" minimum nap roller is used. Several coats will typically be required to obtain the desired thickness. Allow the first coat to dry thoroughly before second coat is applied. Foam-type rollers or shorter naps should not be used, as they will simply slide on the substrate. Rinse and store all rollers used for water-based products in a container of water when not in use. This is necessary, as the material will cure very quickly on the rollers if allowed to "dry out." If this does occur, the rollers will need to be discarded or cleaned with solvent and allowed to dry thoroughly prior to reuse.

# Sprayer Information





## INSTALLATION INSTRUCTIONS

### SPRAYER EQUIPMENT GUIDELINES FOR W. R. MEADOWS FLUID-APPLIED MEMBRANES

#### EQUIPMENT SUMMARY CHART

WRM PRODUCT	Water-Based (W/B) Or Solvent-Based (S/B)	Sprayer Type	Hose	Gun	Spray Tip***
AIR-SHIELD LM	W/B	Graco GH 833 or Hydra Max 350	Rated for 4000 psi	Graco Heavy Duty Texture	Graco GHD 551 (0.051")
MEL-ROL LM	W/B	Graco GH 833 or Hydra Max 350	Rated for 4000 psi	Graco Heavy Duty Texture	Graco GHD 551 (0.051")
AIR-SHIELD LMP	W/B	Graco GH 833 or Hydra Max 350	Rated for 4000 psi	Graco Heavy Duty Texture	Graco GHD 551 or 637 (0.051" or 0.037")
AIR-SHIELD LSR	W/B	Graco GH 833 or Hydra Max 350	Rated for 4000 psi	Graco Heavy Duty Texture	Graco GHD 551 or 637 (0.051" or 0.037")
AIR-SHIELD LM (ALL SEASON)	S/B	Graco GH 833 or Hydra Max 350**	Rated for 4000 psi	Graco Heavy Duty Texture	Graco GHD 635 (0.035")
AIR-SHIELD TMP	W/B	Graco GH 833 or Hydra Max 350	Rated for 4000 psi	Graco Heavy Duty Texture	Graco GHD 551 or 637 (0.051" or 0.037")
MEL-ROL LM (ALL SEASON)	S/B	Graco GH 833 or Hydra Max 350**	Rated for 4000 psi	Graco Heavy Duty Texture	Graco GHD 635 (0.035")

\*\*OTHER TYPES OF STANDARD SPRAYERS ALSO ACCEPTABLE. \*\*\*TIPS SHOULD BE "REVERSIBLE" FOR EASY CLEANOUT.

#### APPLICATION/CLEANUP

WRM PRODUCT	Primer Coat Dilution Ratio (Product : H <sub>2</sub> O)	Primer Coat Application Rate	Minimum Product Temperature (When Sprayed)	Membrane Application Method	Sprayer Cleanup
AIR-SHIELD LM	4-5 : 1	100-150 ft. <sup>2</sup> /gal.	40° F	Sprayer or ¾" (min.) Nap Roller**	Water Flush First
MEL-ROL LM	4-5 : 1	100-150 ft. <sup>2</sup> /gal.	40° F	Sprayer or ¾" (min.) Nap Roller**	Water Flush First
AIR-SHIELD LMP	N/A	N/A	60° F	Sprayer or ¾" (min.) Nap Roller**	Water Flush First
AIR-SHIELD LSR	N/A	N/A	60° F	Sprayer or ¾" (min.) Nap Roller**	Water Flush First
AIR-SHIELD LM (ALL SEASON)	No Dilution Needed	100-150 ft. <sup>2</sup> /gal.	60° F	Sprayer or ¾" (min.) Nap Roller**	Solvent Flush First
AIR-SHIELD TMP	N/A	N/A	60° F	Sprayer or ¾" (min.) Nap Roller**	Water Flush First
MEL-ROL LM (ALL SEASON)	No Dilution Needed	100-150 ft. <sup>2</sup> /gal.	60° F	Sprayer or ¾" (min.) Nap Roller**	Solvent Flush First

\*\*DO NOT USE FOAM OR SHORTER NAP ROLLERS.



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# Sprayer Information



## INSTALLATION INSTRUCTIONS

### SPRAYER EQUIPMENT GUIDELINES FOR W. R. MEADOWS FLUID-APPLIED MEMBRANES

#### EQUIPMENT CLEANUP

##### WATER-BASED PRODUCTS:

- Solvents must NOT come in contact with the liquid emulsion AIR-SHIELD LM and MEL-ROL LM products while in the sprayer, as they will immediately break the emulsion and plug up the entire sprayer system.
- Before starting to spray, the sprayer MUST be flushed with clean water.
- When spraying is complete, material must NOT be left in the pump, lines or gun as the MEL-ROL/AIR-SHIELD emulsions will quickly begin to break and cure in the equipment. When finished spraying, WATER ONLY should be PROMPTLY flushed through the system until pump and hose run clear. Do NOT add soap to the flush water, as it too will break the emulsion. "Simple Green" cleaner is the only cleaner found that can be used successfully.
- When spraying is complete, solvents, including xylene, toluene, mineral spirits, paint thinner, gasoline, etc., must NOT be used for the INITIAL flushing of the system. These solvents will break the emulsion and clog the system
- Aromatic solvents (xylene or toluene) are recommended for the FINAL flushing AFTER water has been flushed through the pump and lines. If solvent is pumped through the system after being flushed with water, all equipment MUST be flushed with water before spraying emulsion. All traces of solvent MUST be completely removed. Note: Aromatic solvent may be used to soak and clean the pump housing, gun, and tips. Solvents can be left in the sprayer for short durations (days) to aid in cleaning of the system. Solvents left in the sprayer for extended periods may begin to degrade the seals and hose. Again, all traces of solvent MUST be removed prior to using the equipment with the water-based emulsion products.

##### SOLVENT-BASED, ALL SEASON PRODUCTS:

- While the ALL SEASON products are stable in the sprayer, once spraying is complete, solvents should be flushed through the system until pump and hose run clear. Aromatic solvents (xylene or toluene) work best, but mineral spirits, paint thinner, etc., can also be used. Solvents can be left in the sprayer for short periods of time, but should NOT be allowed to remain in the sprayer for extended periods of time, as they may begin to degrade the seals and hose.
- When switching from a solvent-based to a water-based product: After flushing with solvent, water MUST be flushed through the ENTIRE system until all traces of solvent have been removed. When beginning to spray a water-based emulsion product, if ANY solvent remains in the sprayer, the pump, hose, gun, and spray tips WILL CLOG and will need to be cleaned out.

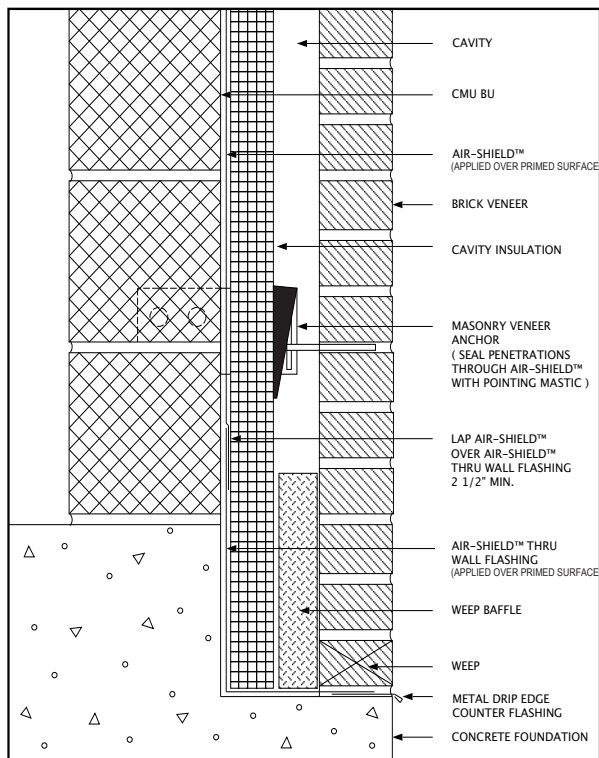


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## Sprayer Information

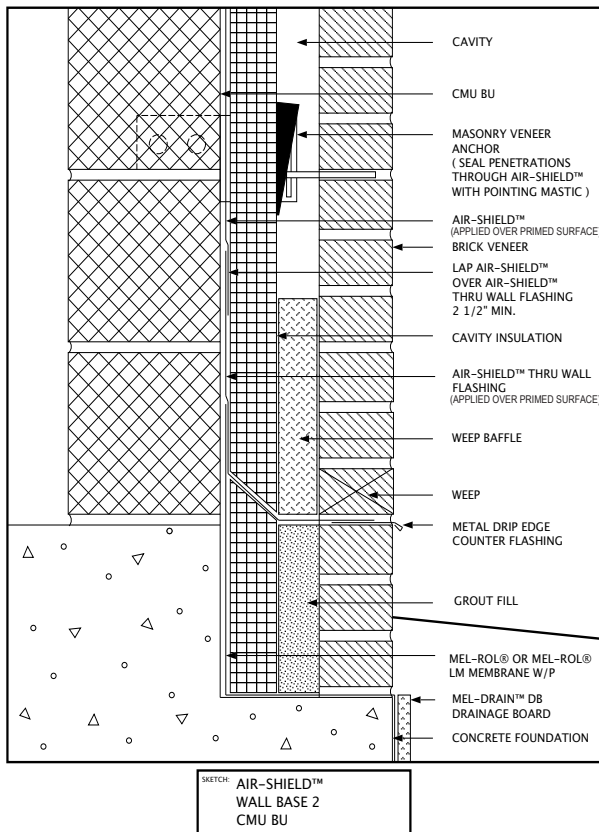




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CMU BU

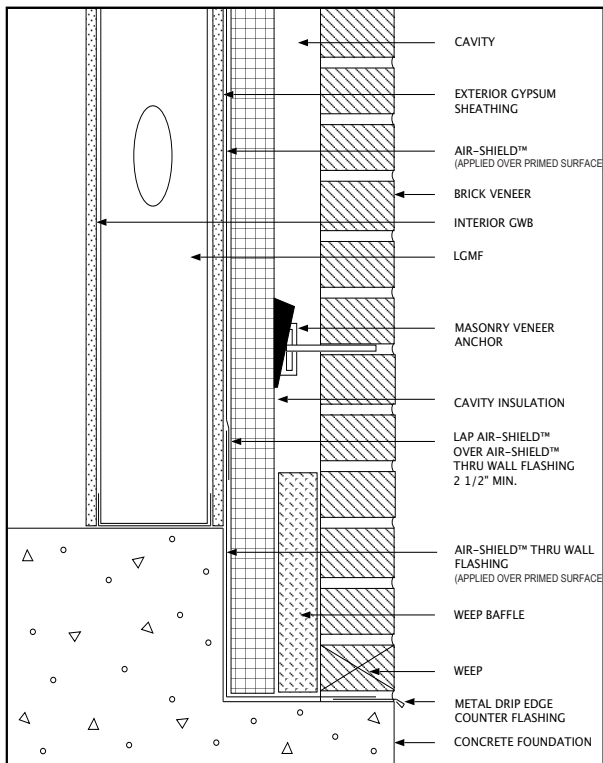


# Air Barriers



# Air Barriers

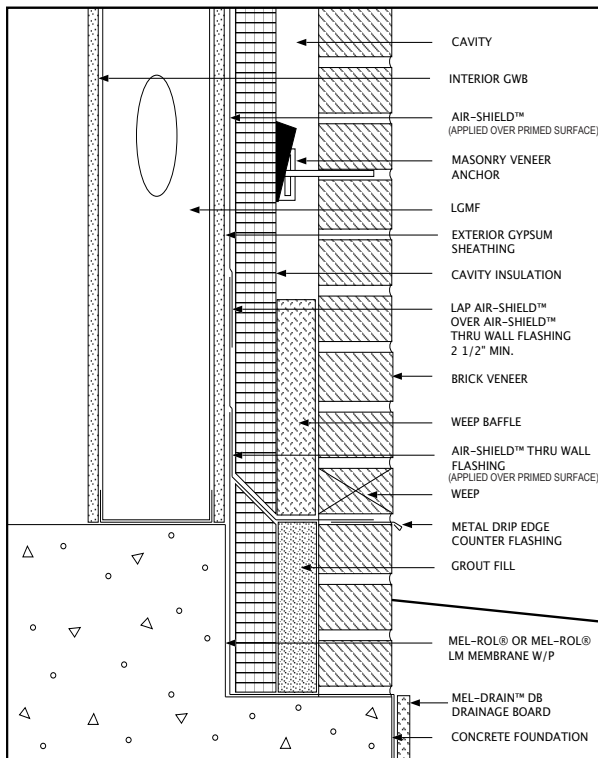




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WALL BASE 3  
LGMF BU



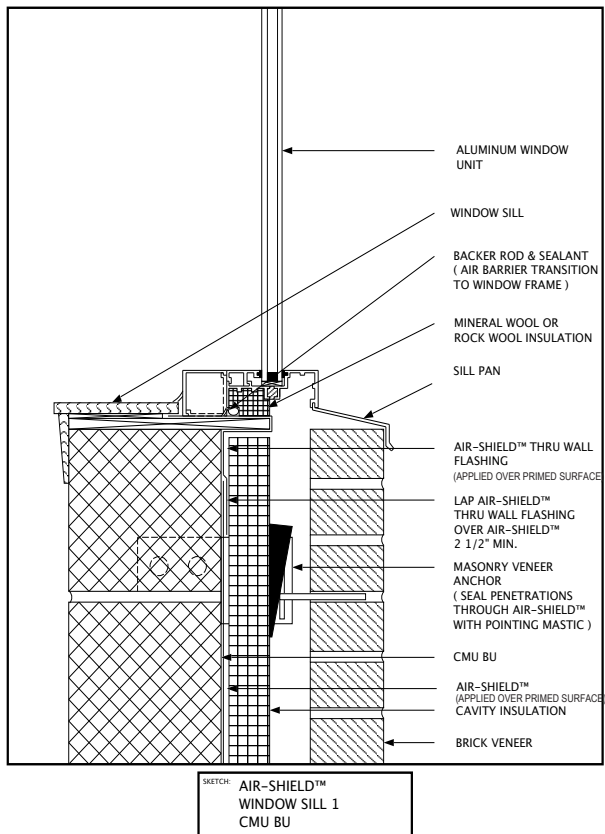
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WALL BASE 4  
LGMF BU

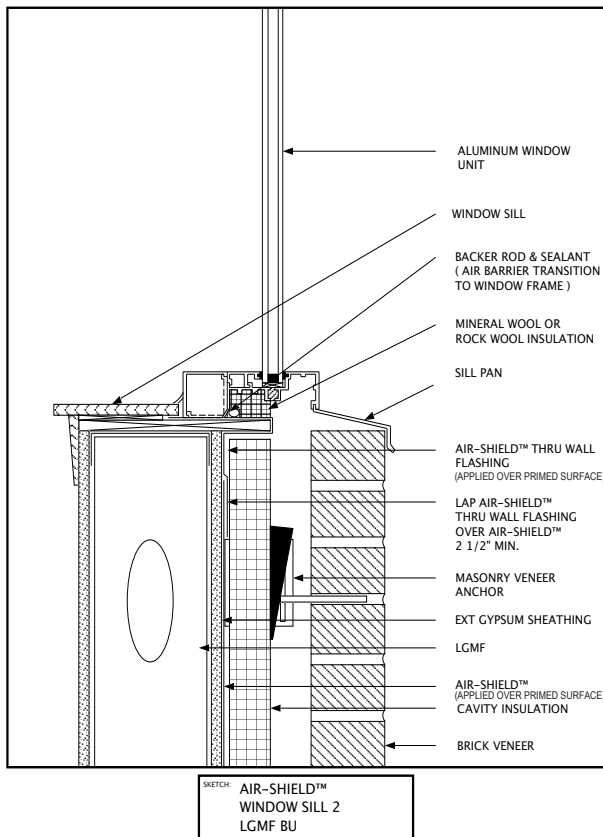
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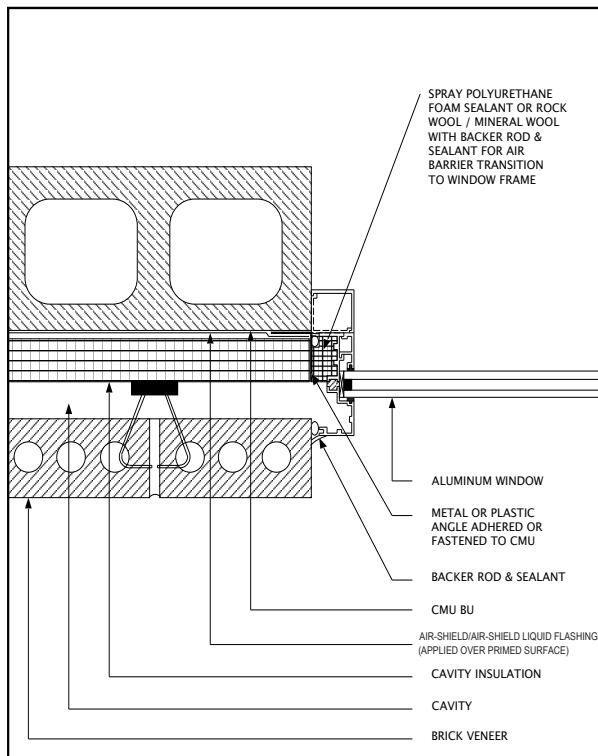
# Air Barriers





## Air Barriers

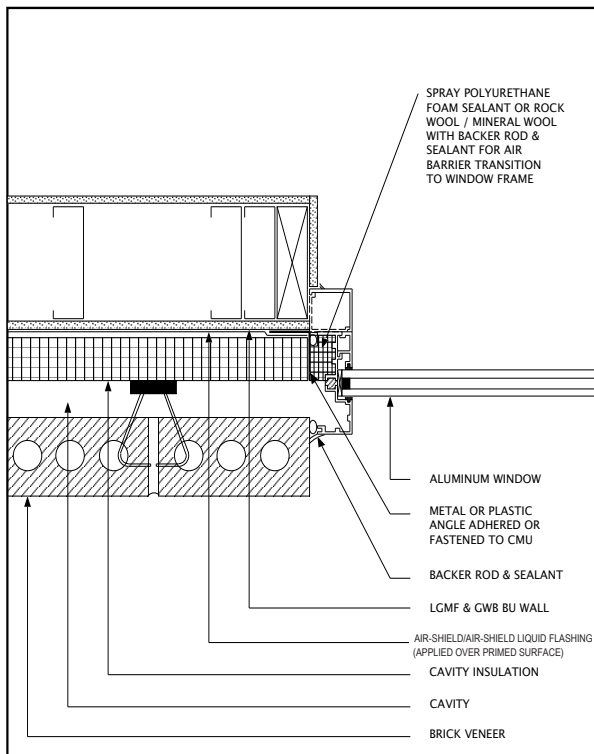




SKETCH: AIR-SHIELD™  
WINDOW JAMB 1  
CMU BU



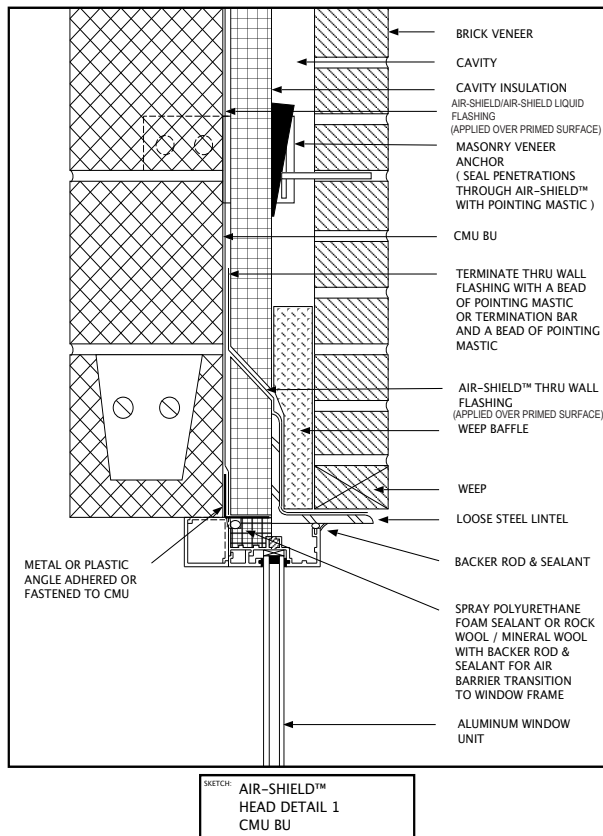
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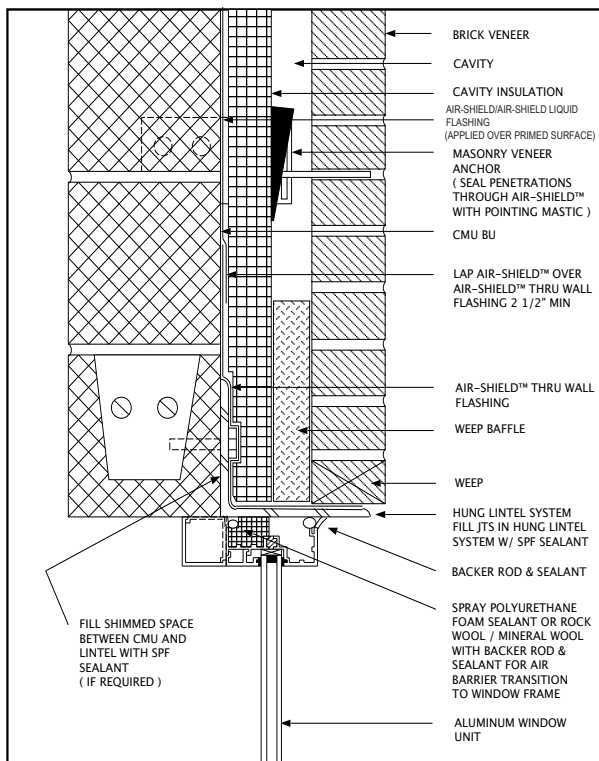
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WINDOW JAMB 2  
LGMF BU

## Air Barriers



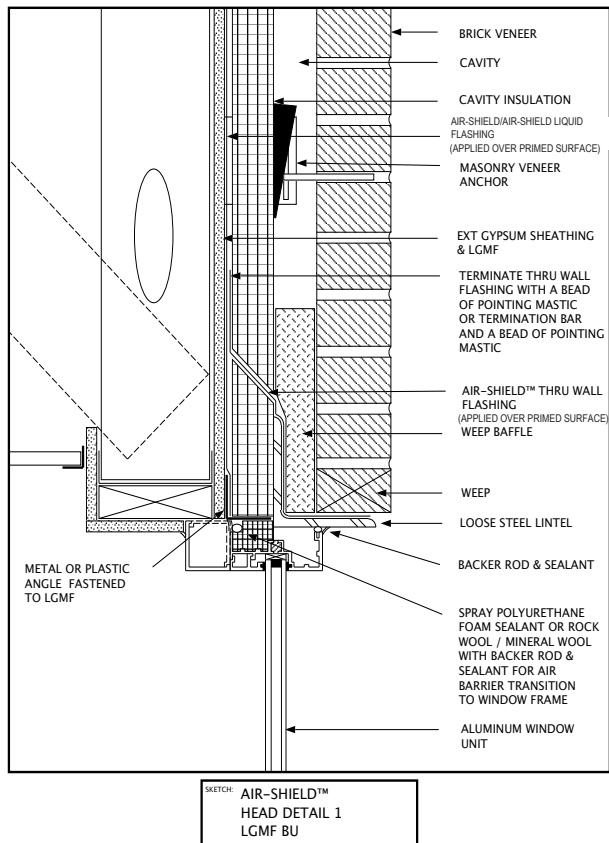


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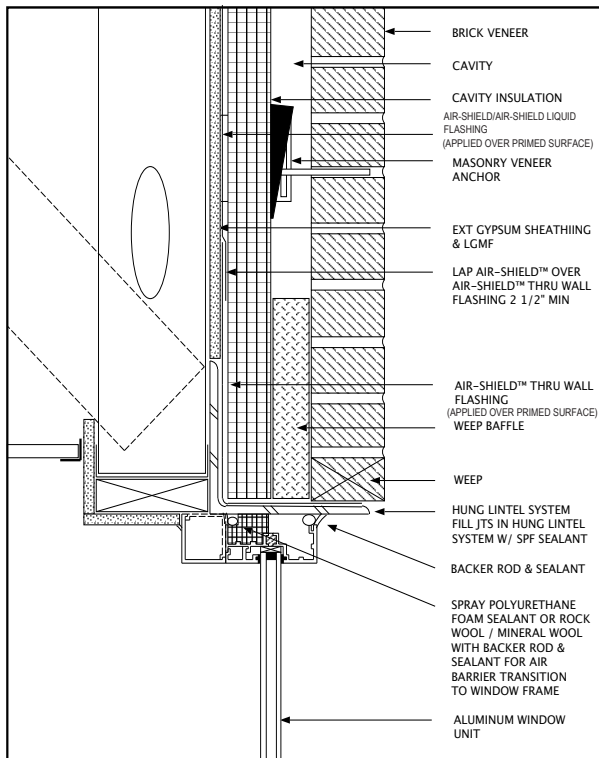


SKETCH: AIR-SHIELD™  
HEAD DETAIL 2  
CMU BU



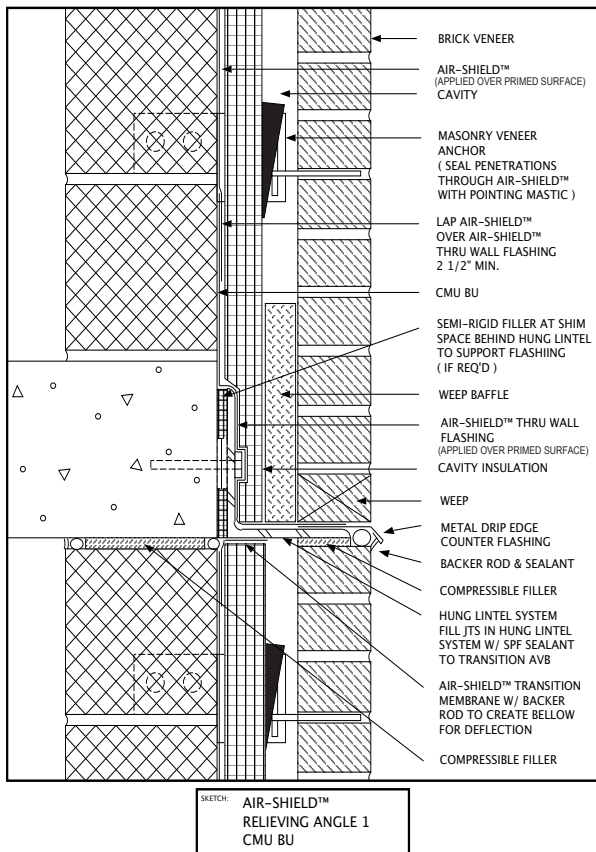


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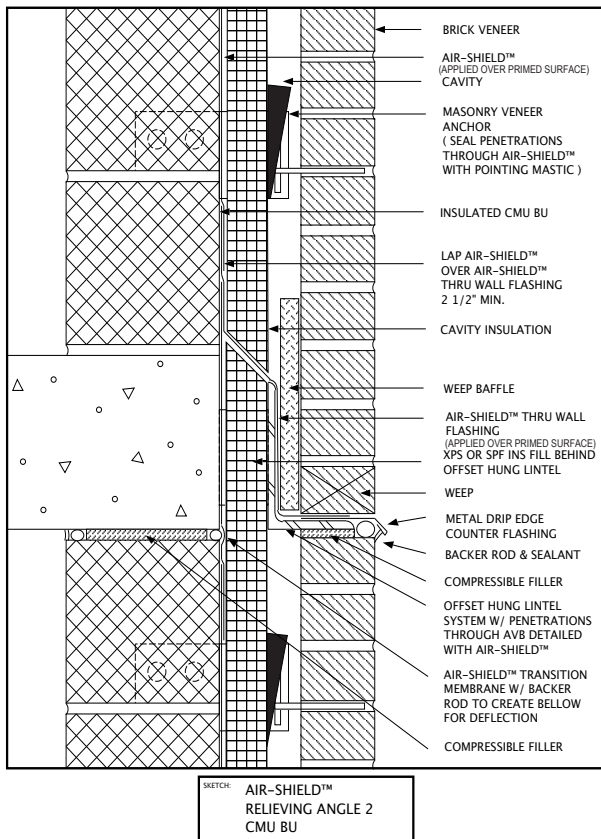
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HEAD DETAIL 2  
LGMF BU





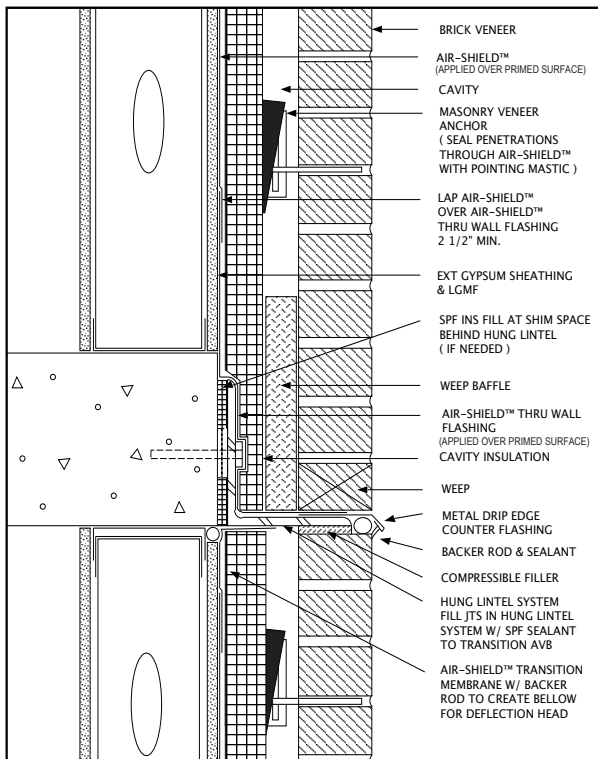
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## Air Barriers

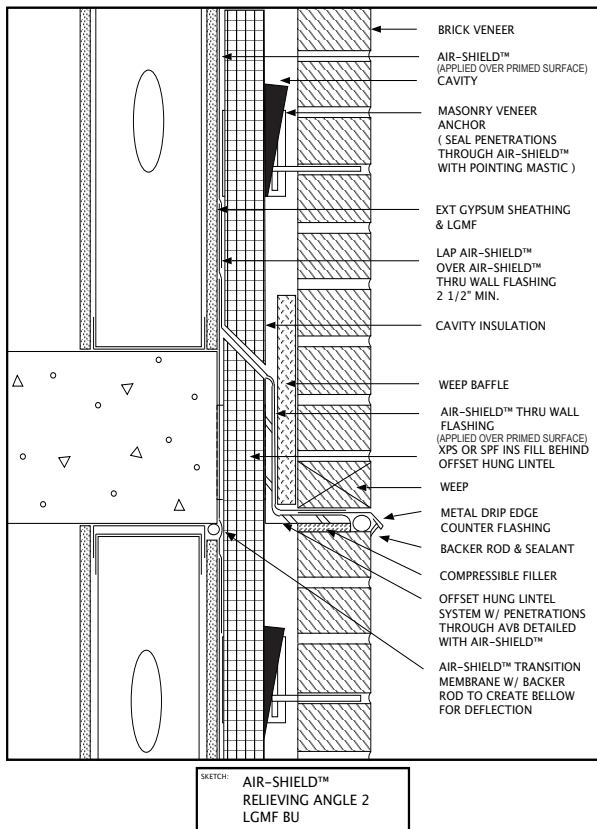




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LGMF BU

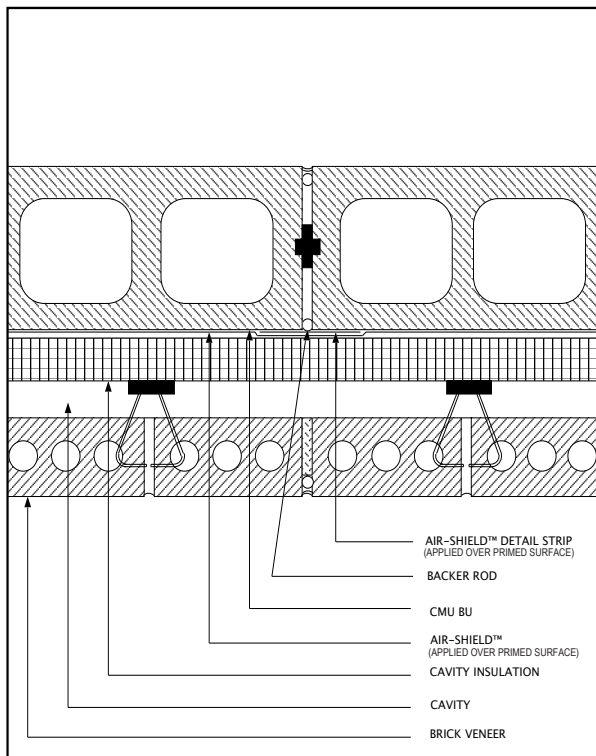


## Air Barriers



## Air Barriers

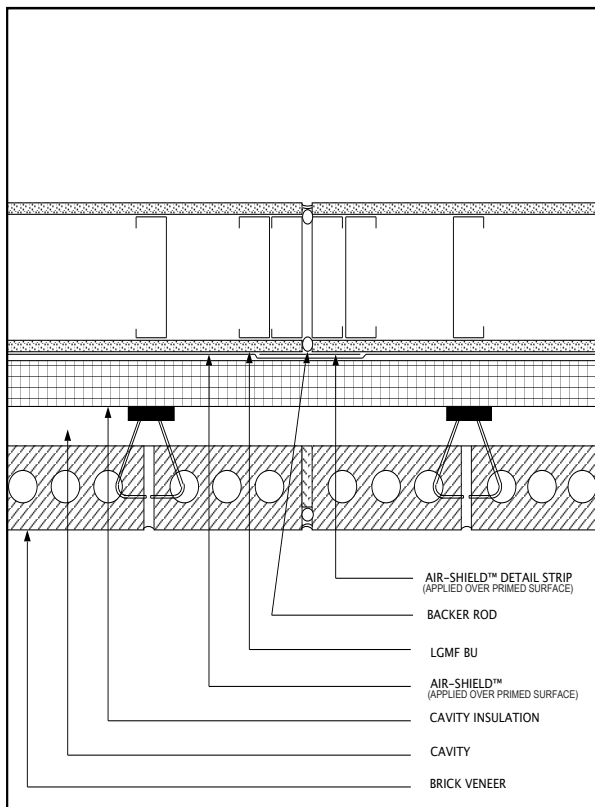




SKETCH: AIR-SHIELD™  
CONTROL JOINT  
CMU BU



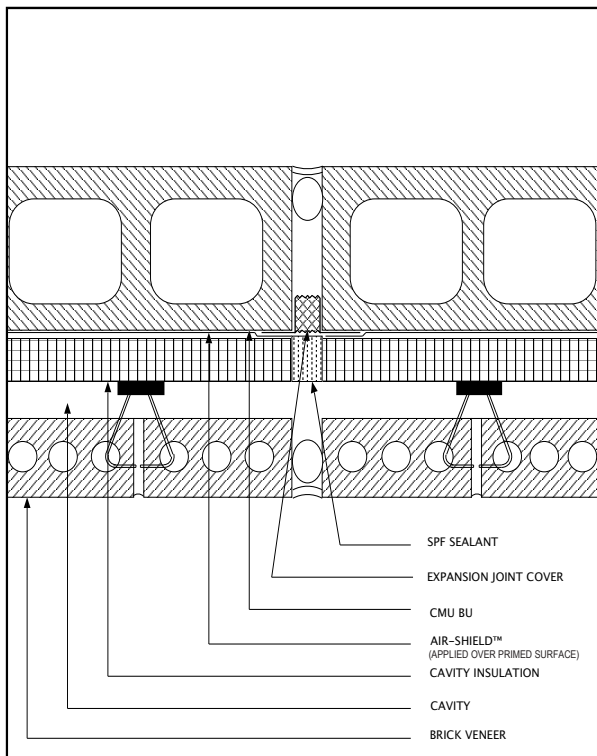
## Air Barriers



SKETCH: AIR-SHIELD™  
CONTROL JOINT  
LGMF BU

# Air Barriers

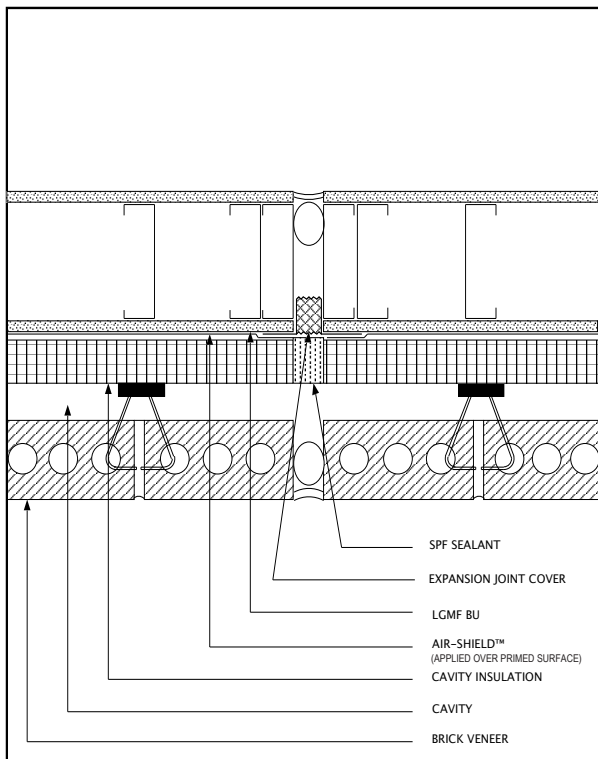




SKETCH: AIR-SHIELD™  
EXPANSION JOINT  
CMU BU



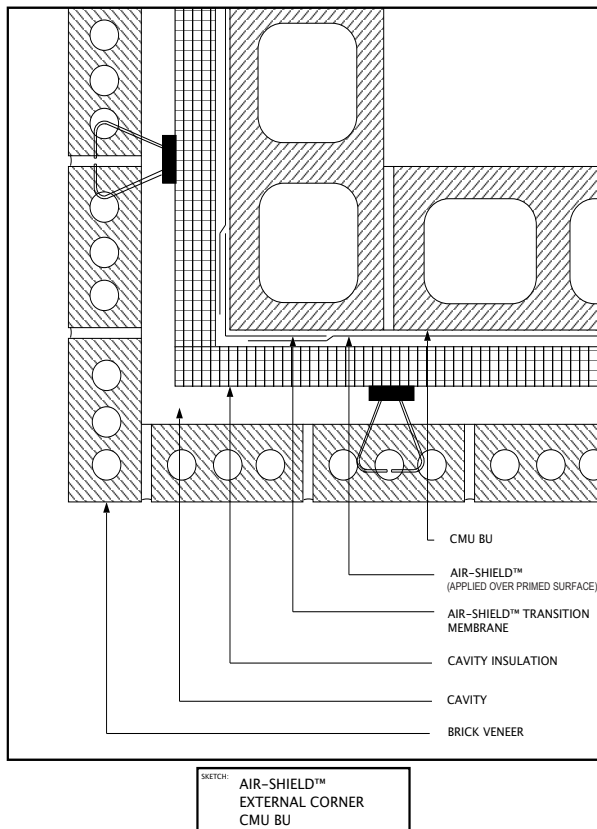
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SKETCH: AIR-SHIELD™  
EXPANSION JOINT  
LGMF BU

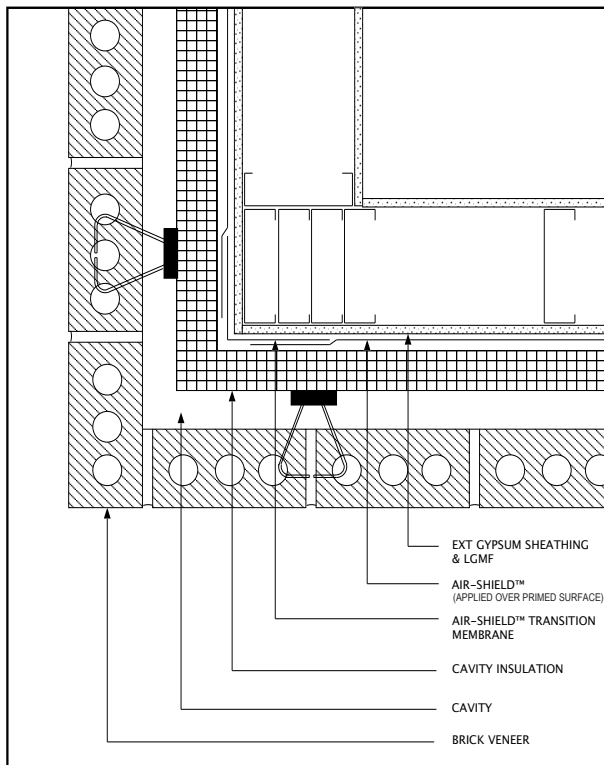
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## Air Barriers



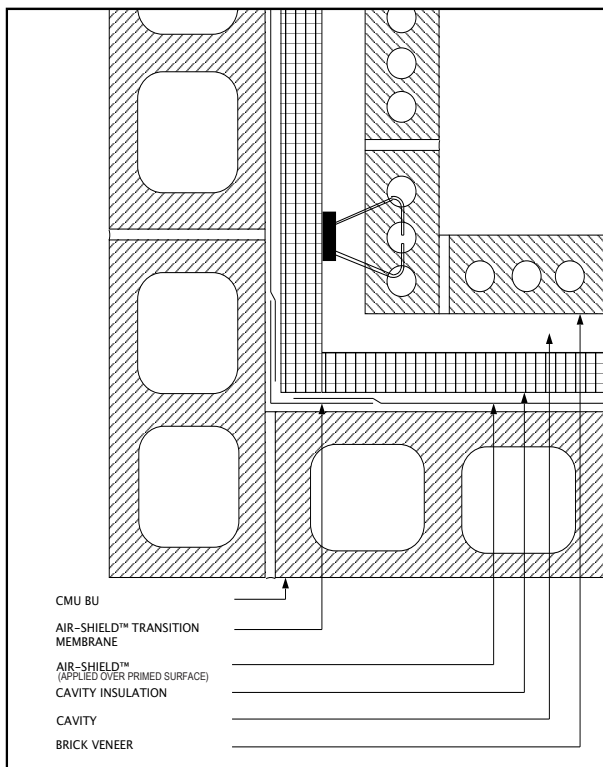


SKETCH:

AIR-SHIELD™  
EXTERNAL CORNER  
LGMF BU

# Air Barriers

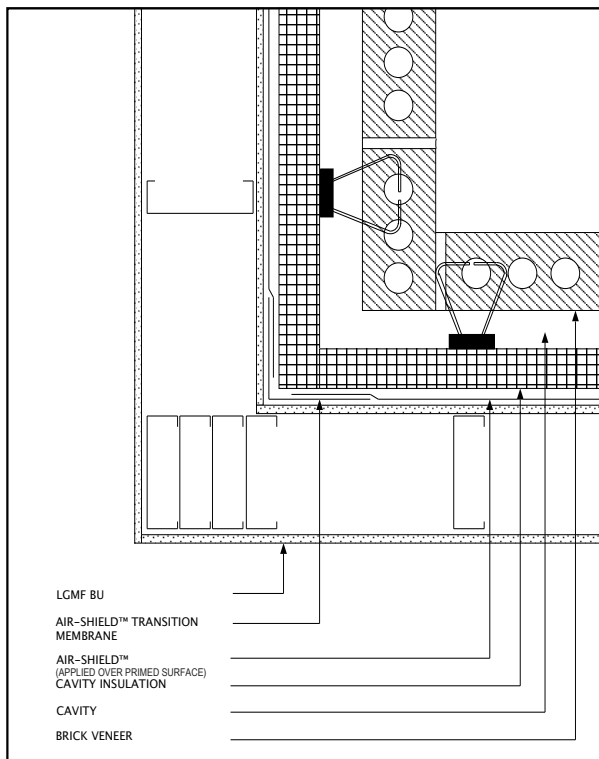




SKETCH: AIR-SHIELD™  
INTERNAL CORNER  
CMU BU



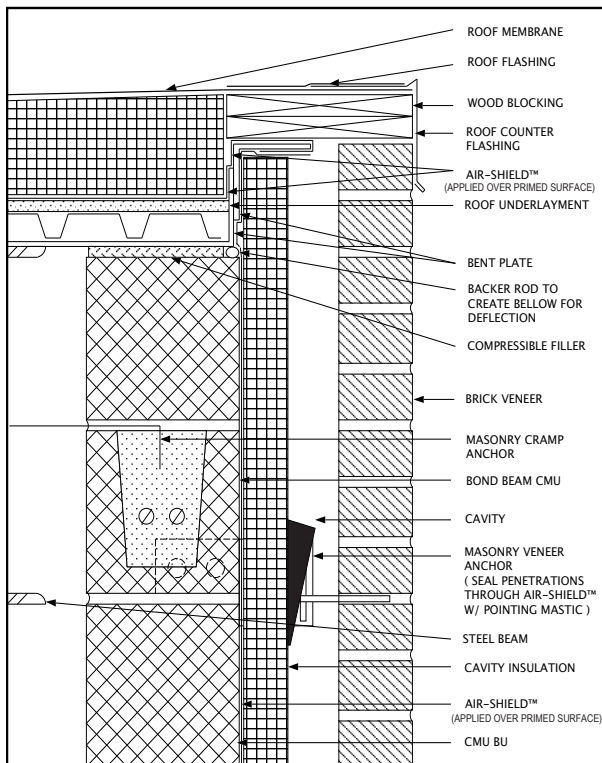
## Air Barriers



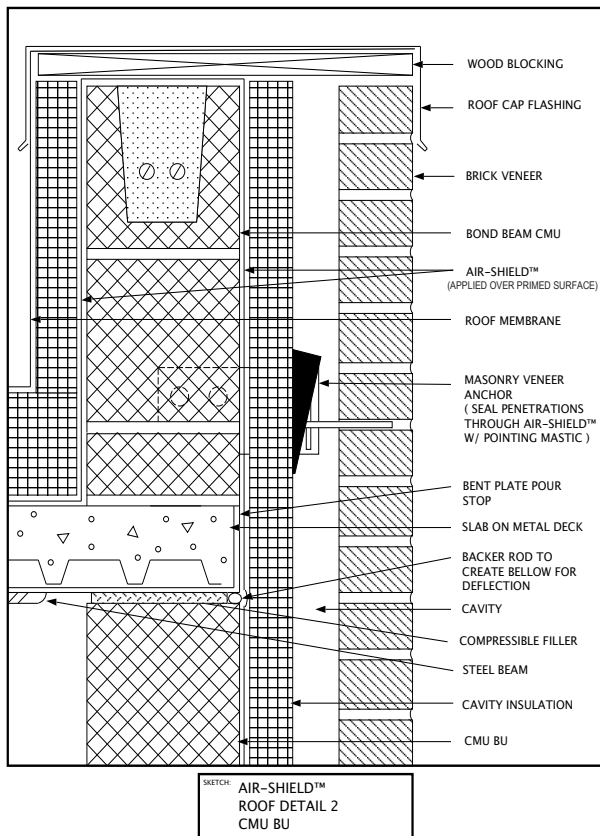
SKETCH: AIR-SHIELD™  
INTERNAL CORNER  
LGMF BU

## Air Barriers



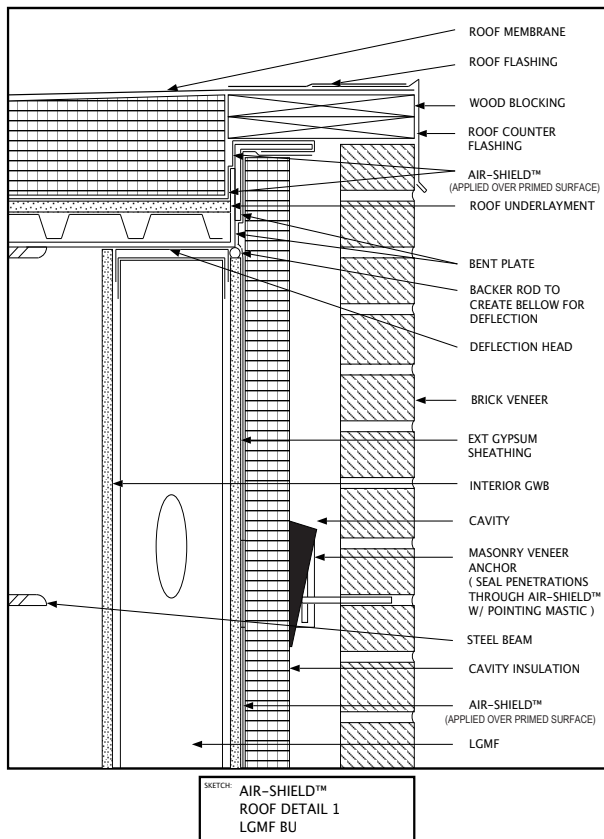


# Air Barriers

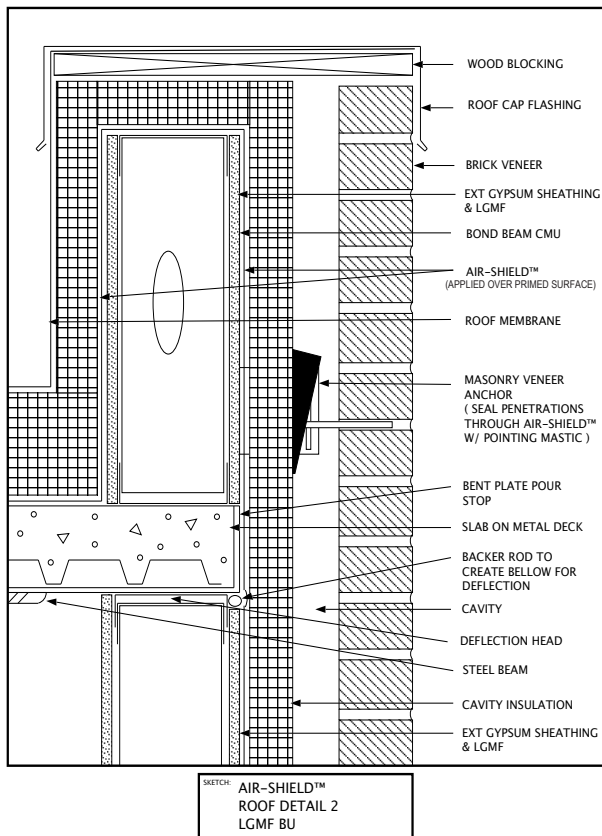


## Air Barriers



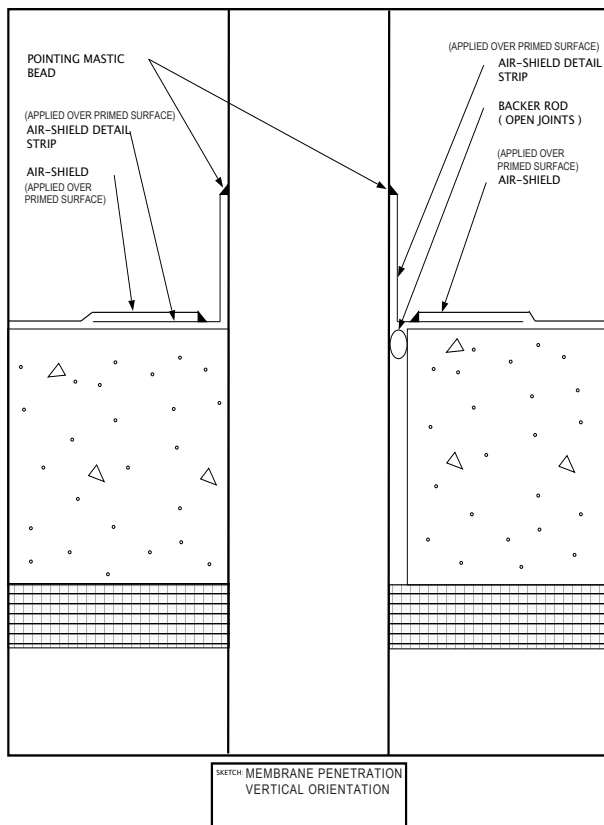


# Air Barriers



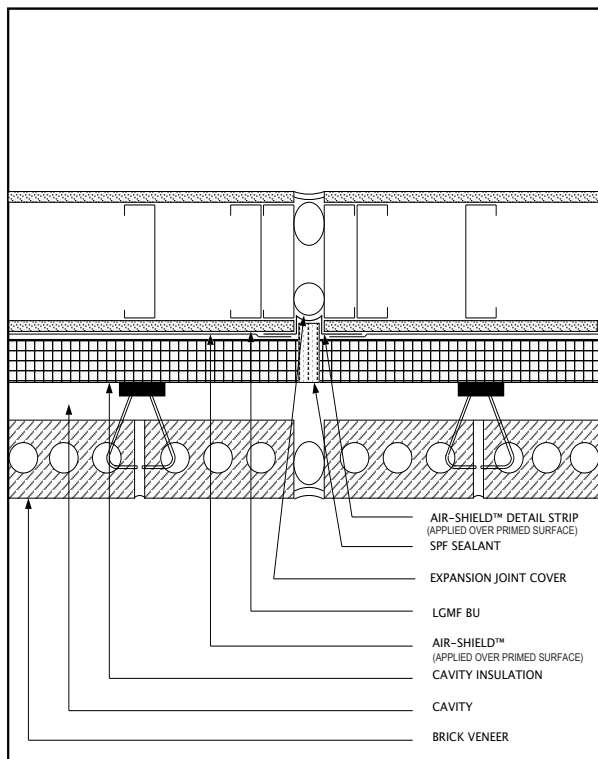
## Air Barriers





# Air Barriers

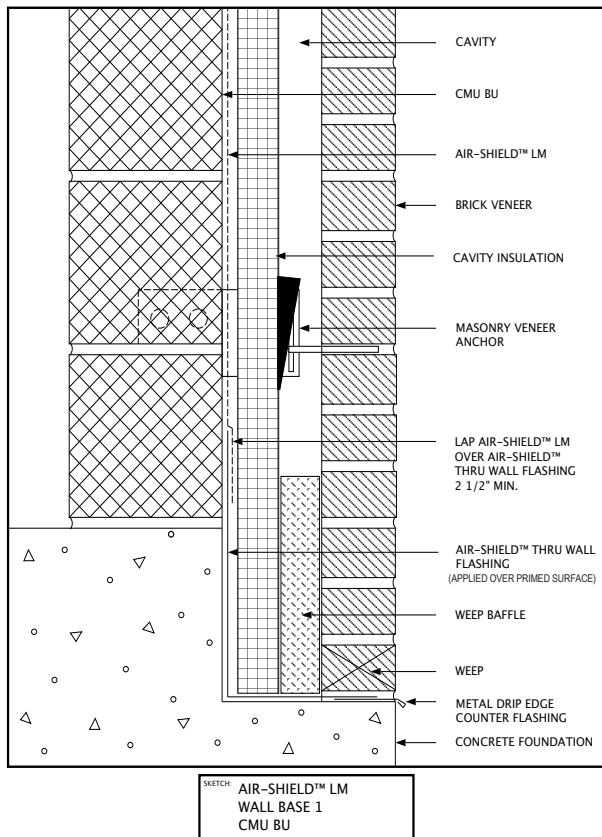




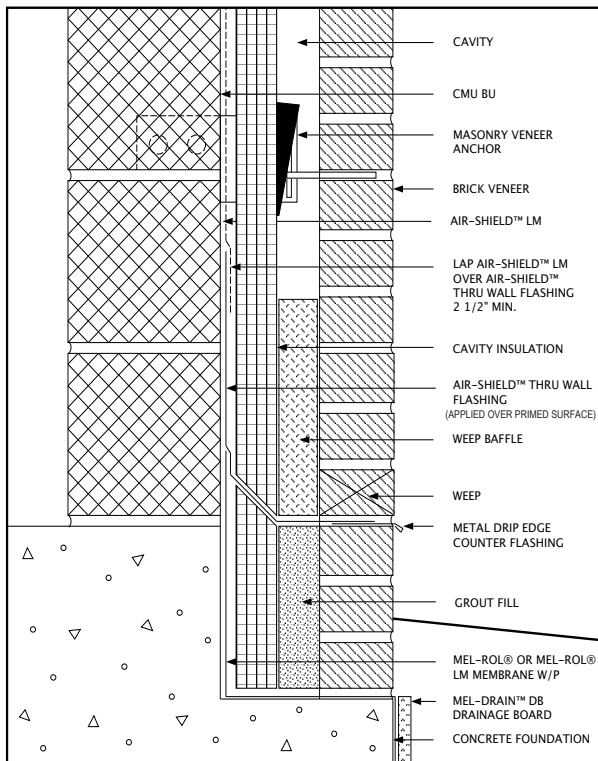
SKETCH: AIR-SHIELD™  
EXPANSION JOINT 2  
LGMF BU

# Air Barriers





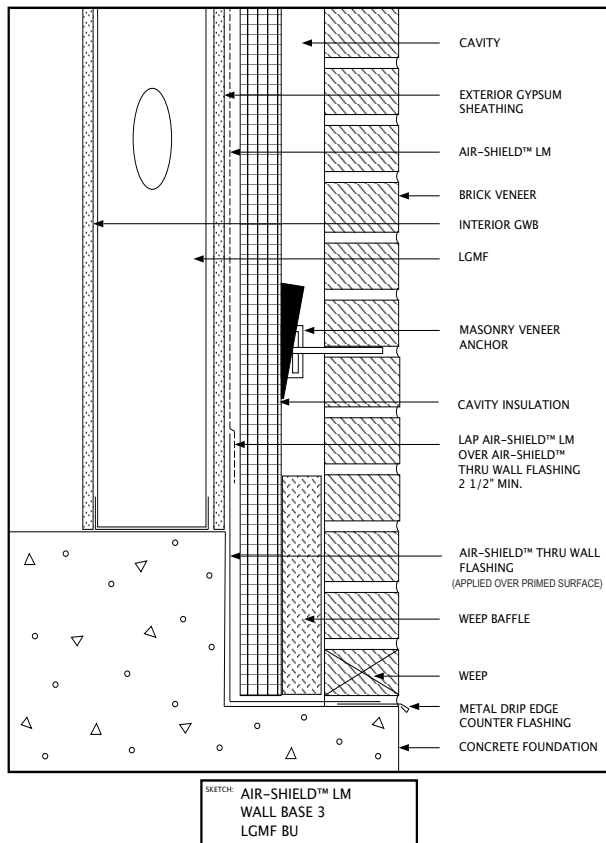
# Air Barriers



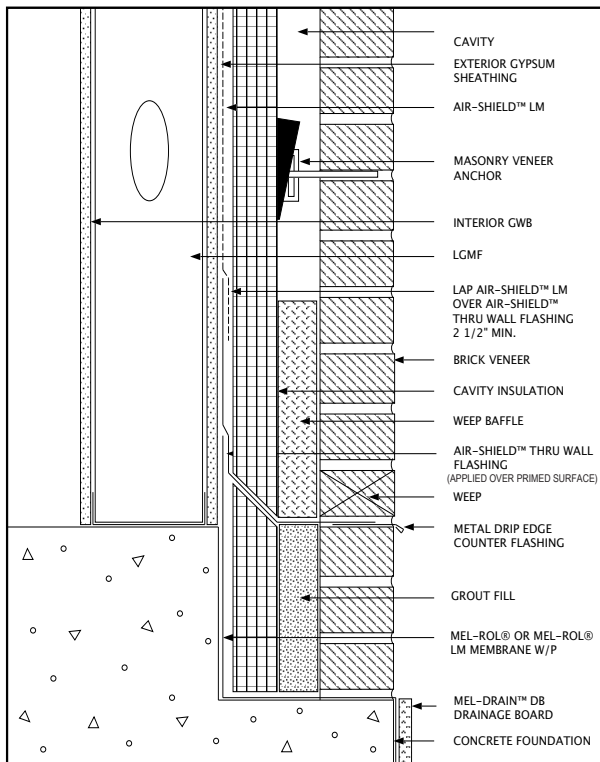
SKETCH: AIR-SHIELD™ LM  
WALL BASE 2  
CMU BU

## Air Barriers





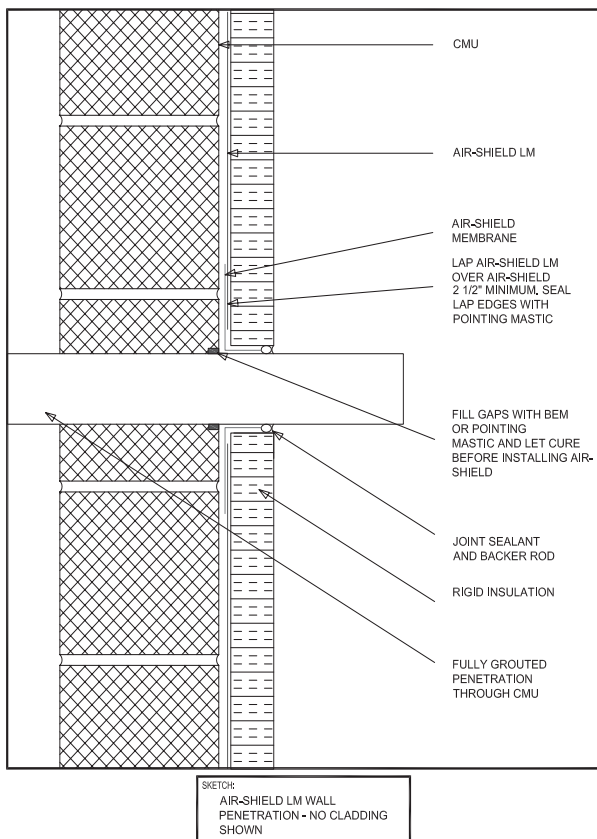
# Air Barriers



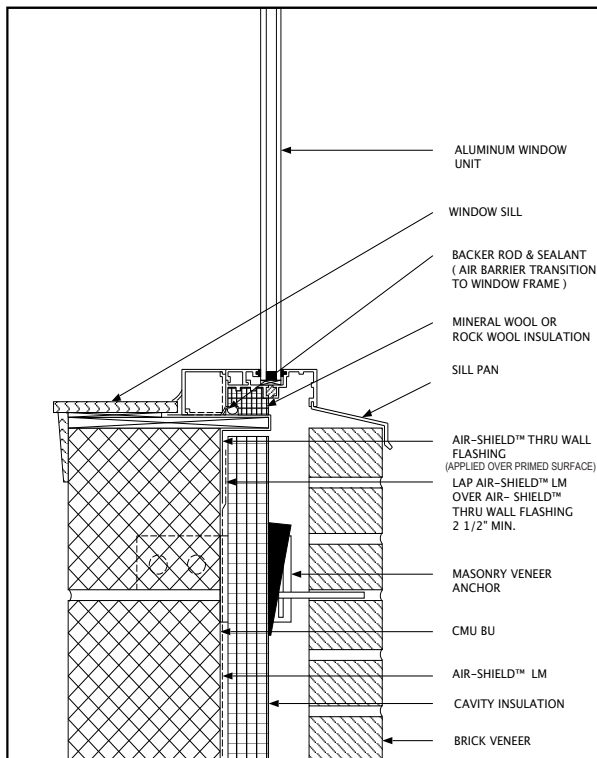
SKETCH: AIR-SHIELD™ LM  
WALL BASE 4  
LGMF BU

## Air Barriers





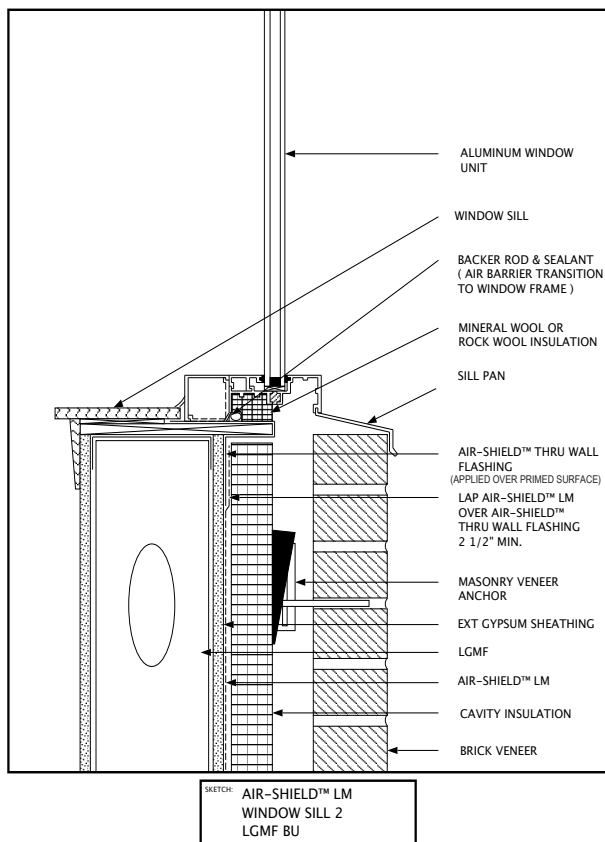
# Air Barriers



SKETCH: AIR-SHIELD™ LM  
WINDOW SILL 1  
CMU BU

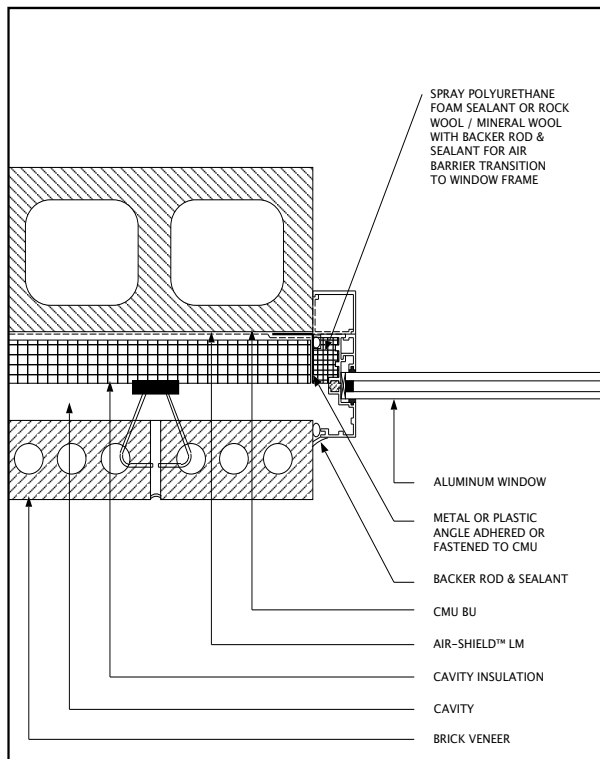
## Air Barriers





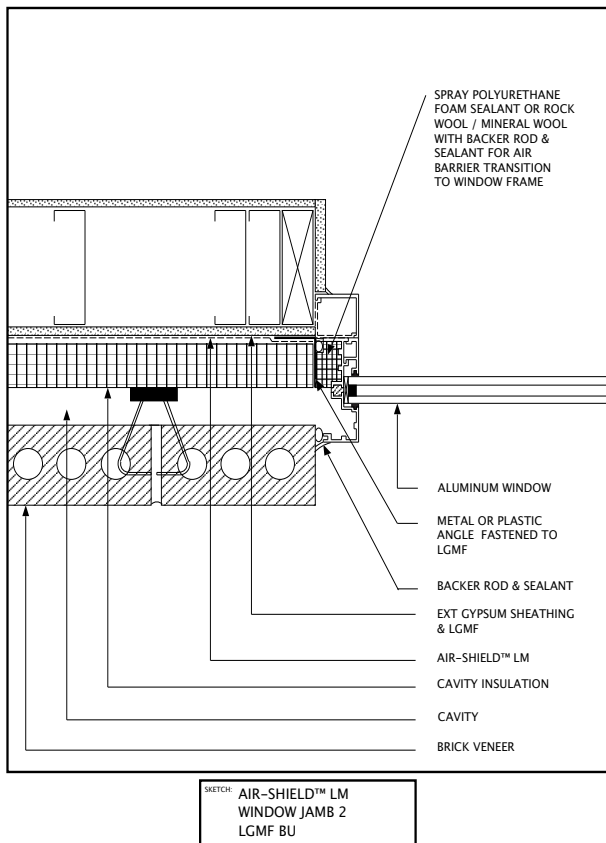
# Air Barriers



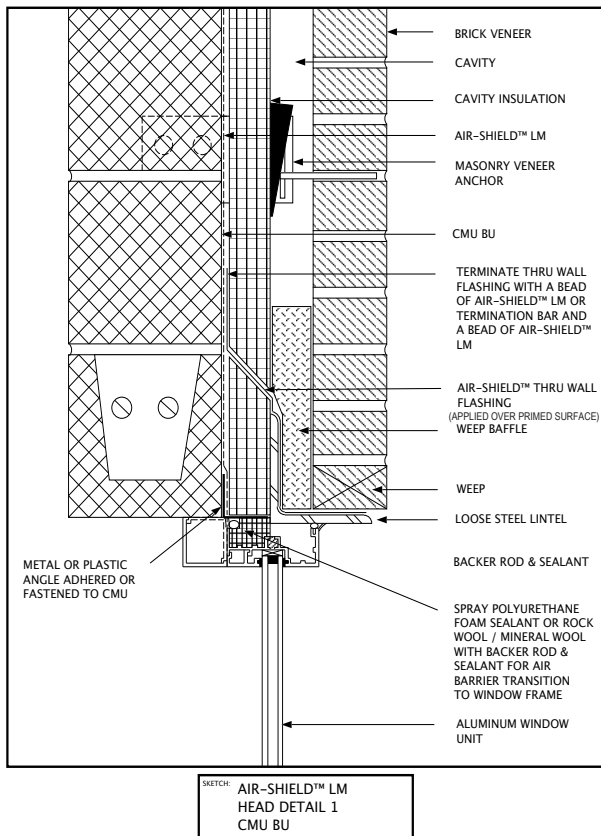


SKETCH: AIR-SHIELD™ LM  
WINDOW JAMB 1  
CMU BU



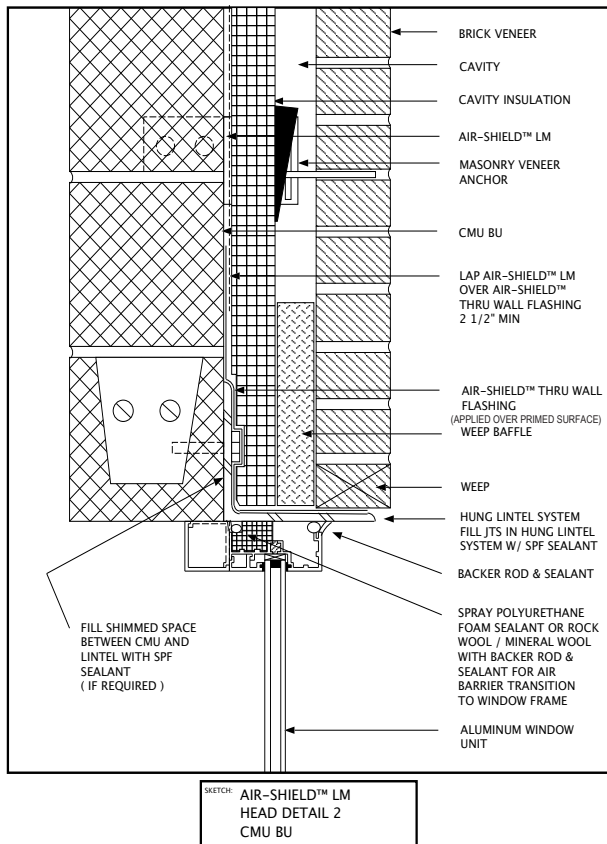


# Air Barriers

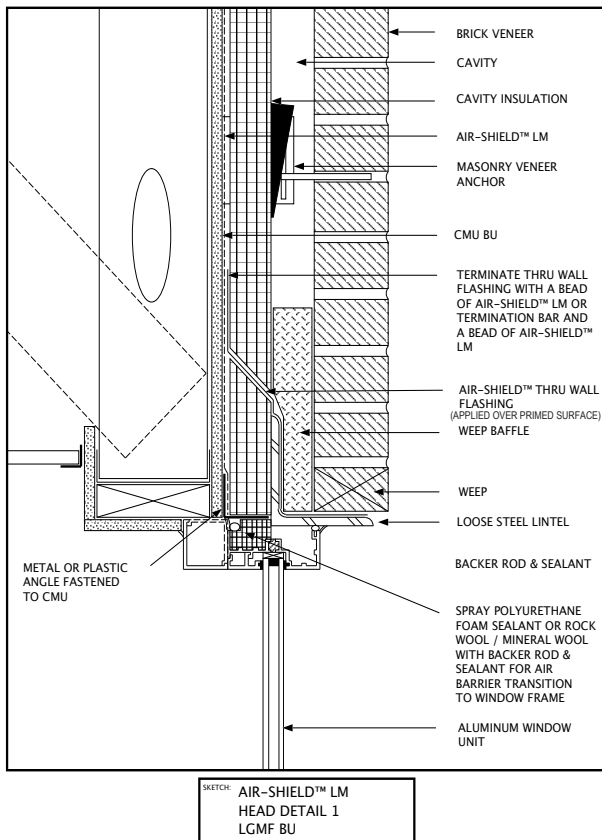


## Air Barriers



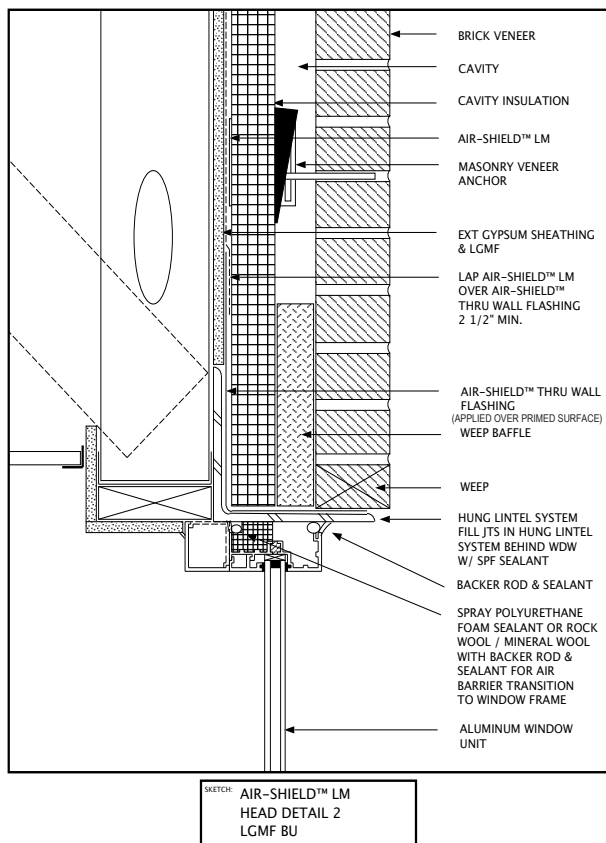


# Air Barriers

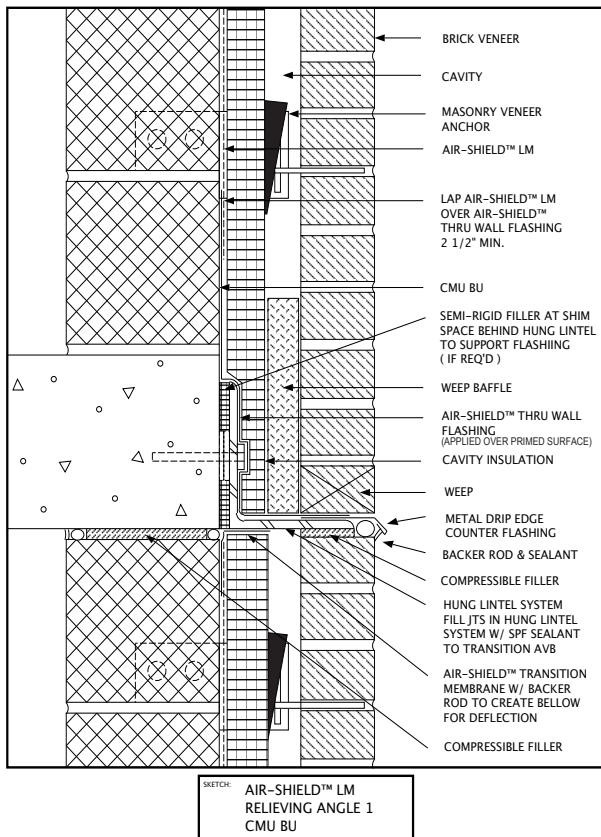


## Air Barriers



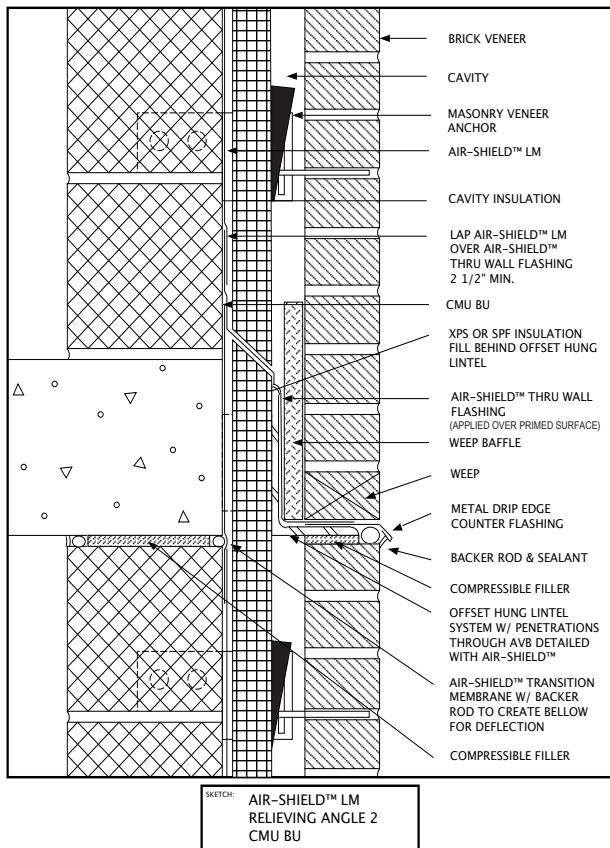


# Air Barriers



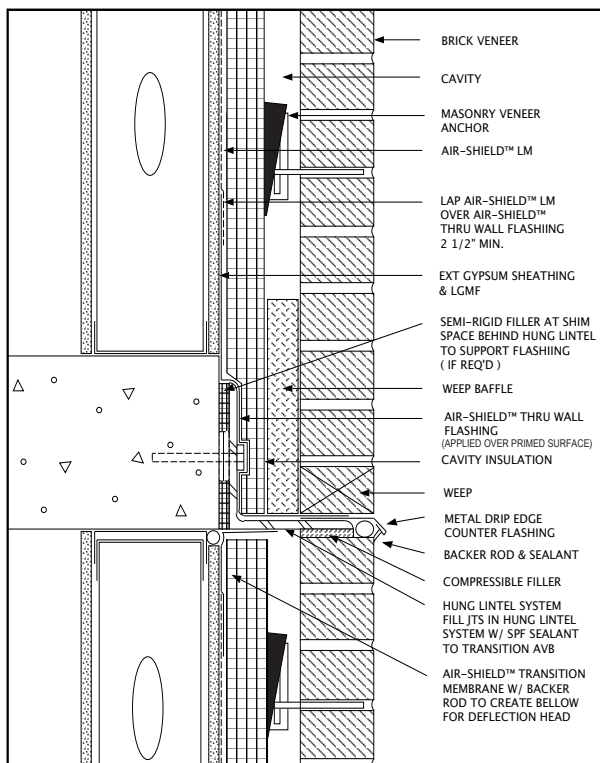
## Air Barriers





# Air Barriers

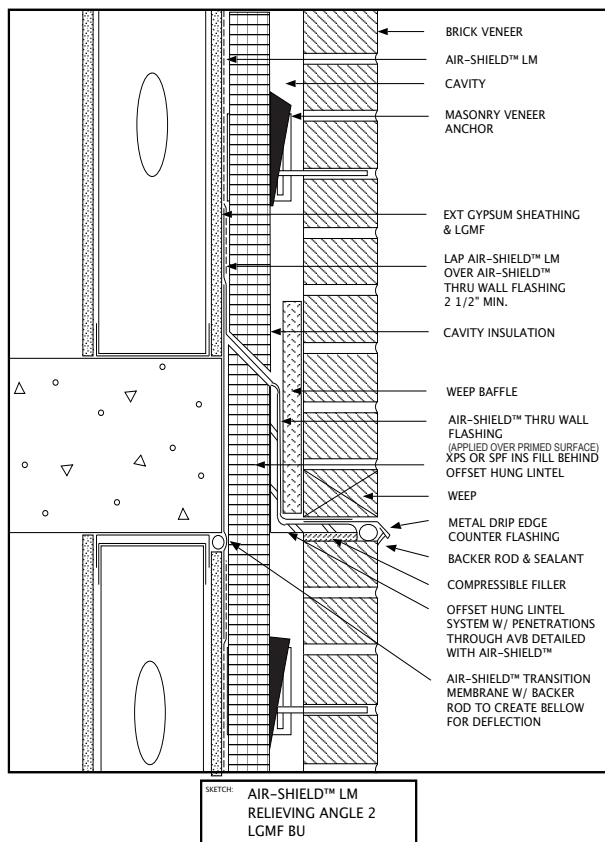


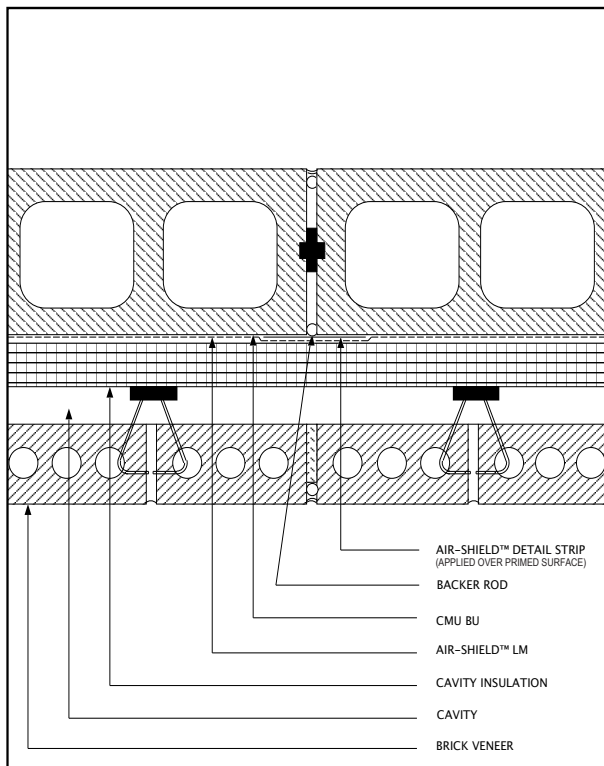


SKETCH: AIR-SHIELD™ LM  
RELIEVING ANGLE 1  
LGMF BU

## Air Barriers



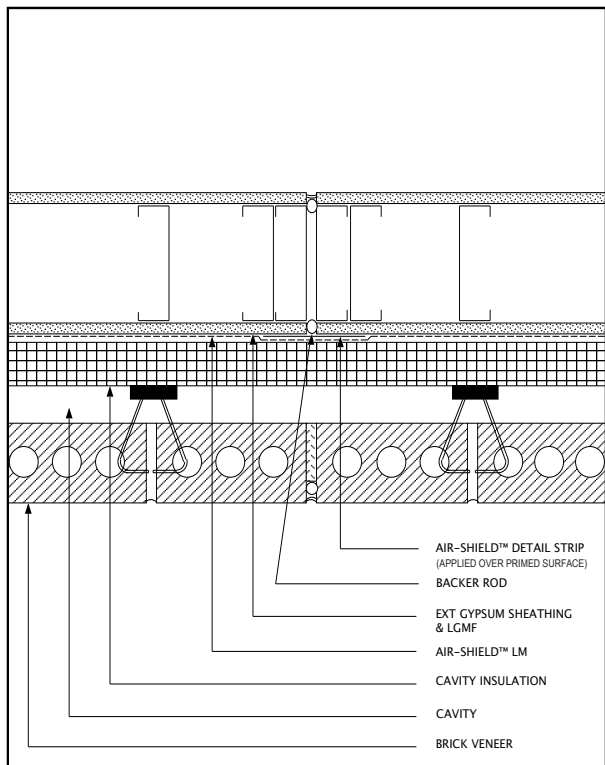




SKETCH: AIR-SHIELD™ LM  
CONTROL JOINT  
CMU BU

## Air Barriers

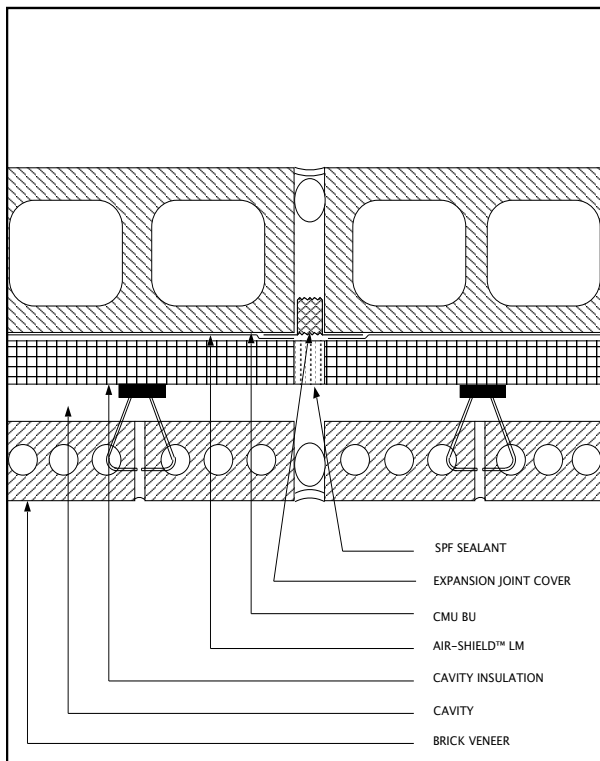




SKETCH: AIR-SHIELD™ LM  
CONTROL JOINT  
LGMF BU



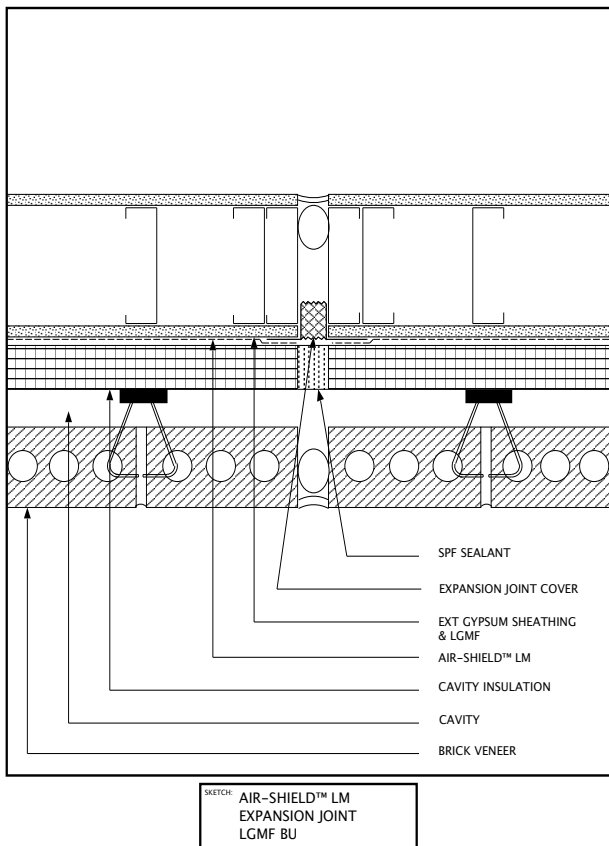
**Air Barriers**



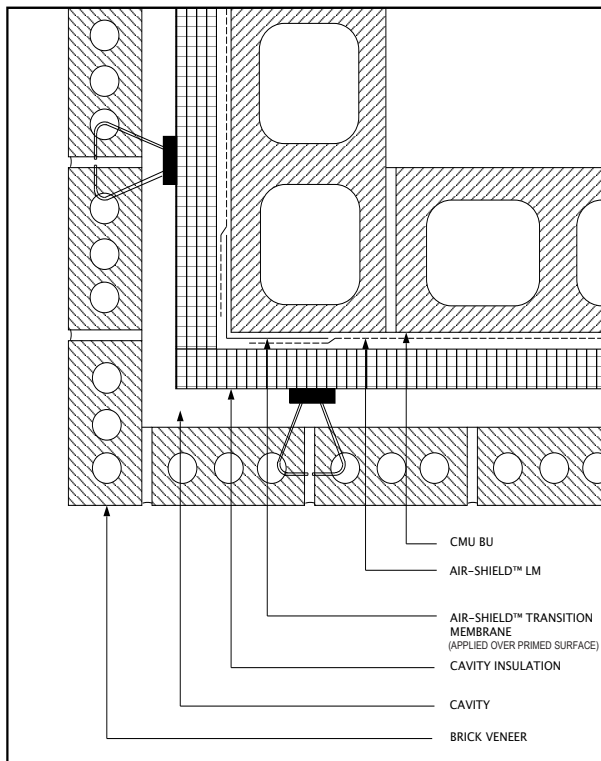
SKETCH: AIR-SHIELD™ LM  
EXPANSION JOINT  
CMU BU

## Air Barriers





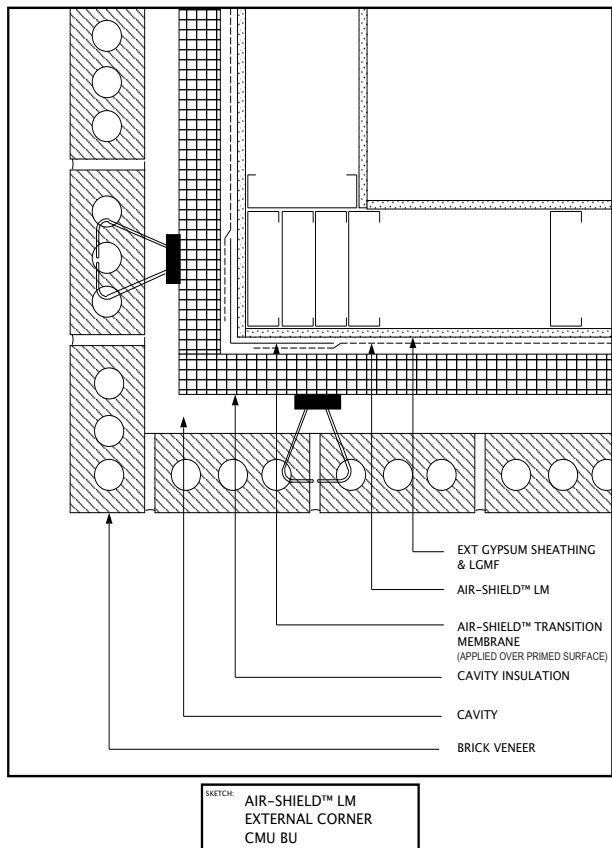
# Air Barriers



SKETCH: AIR-SHIELD™ LM  
EXTERNAL CORNER  
CMU BU

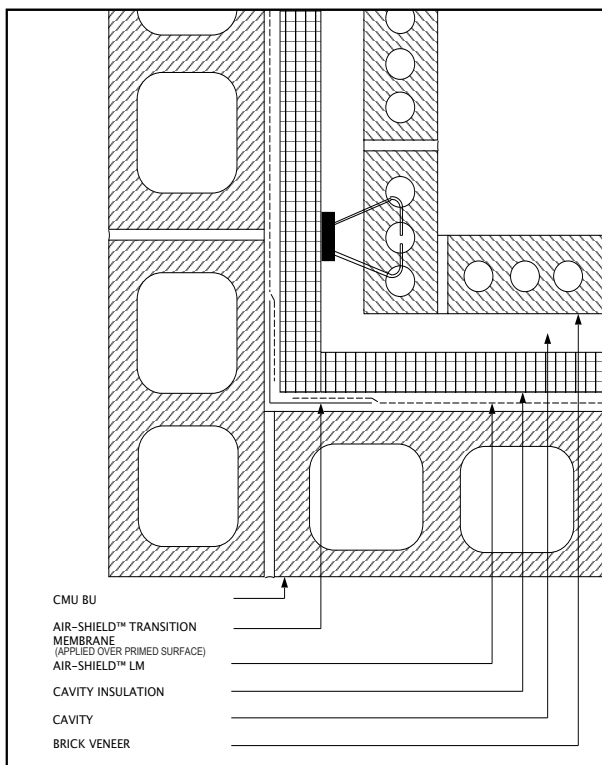
## Air Barrier





# Air Barriers

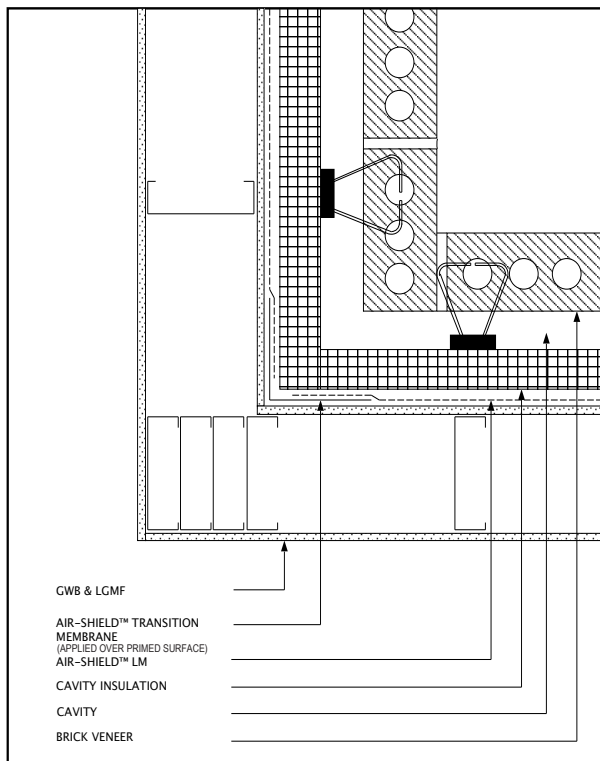




SKETCH: AIR-SHIELD™ LM  
INTERNAL CORNER  
CMU BU

## Air Barrier

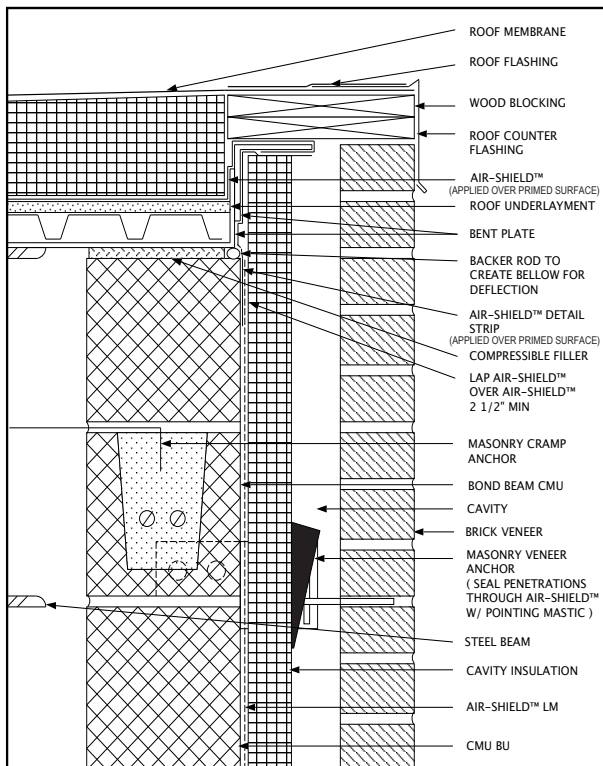




SKETCH: AIR-SHIELD™ LM  
 INTERNAL CORNER  
 LGMF BU



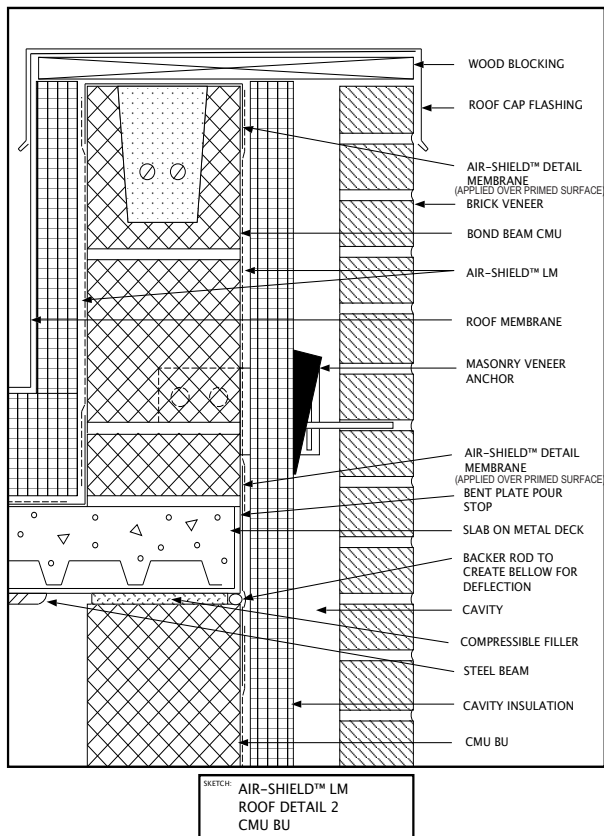
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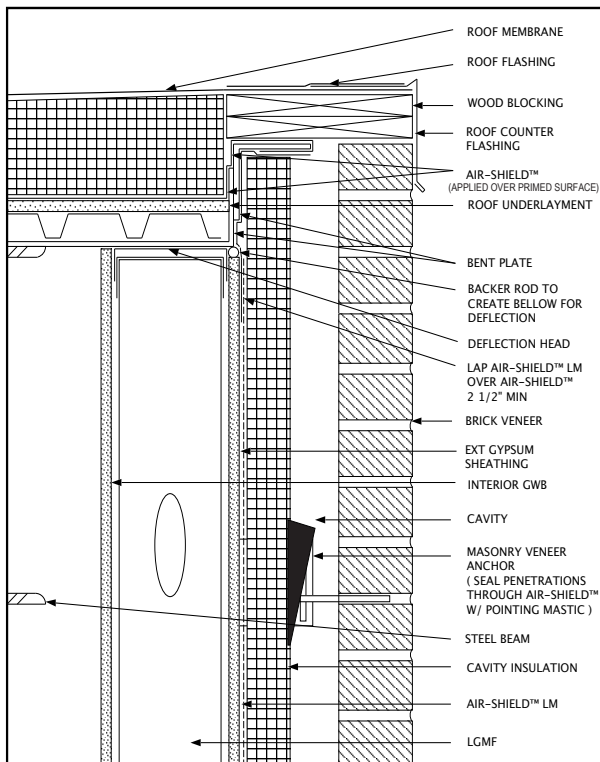
SKETCH: AIR-SHIELD™ LM  
ROOF DETAIL 1  
CMU BU

## Air Barrier





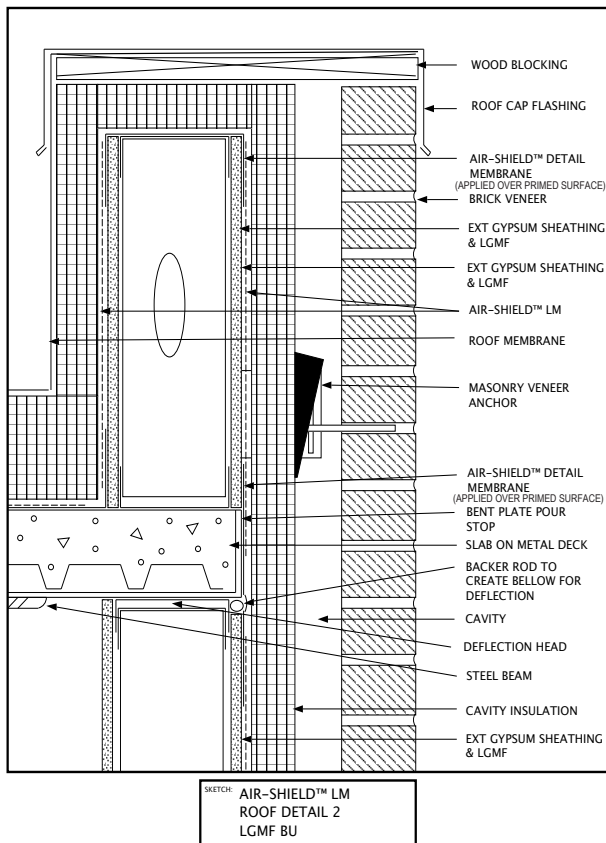
# Air Barriers



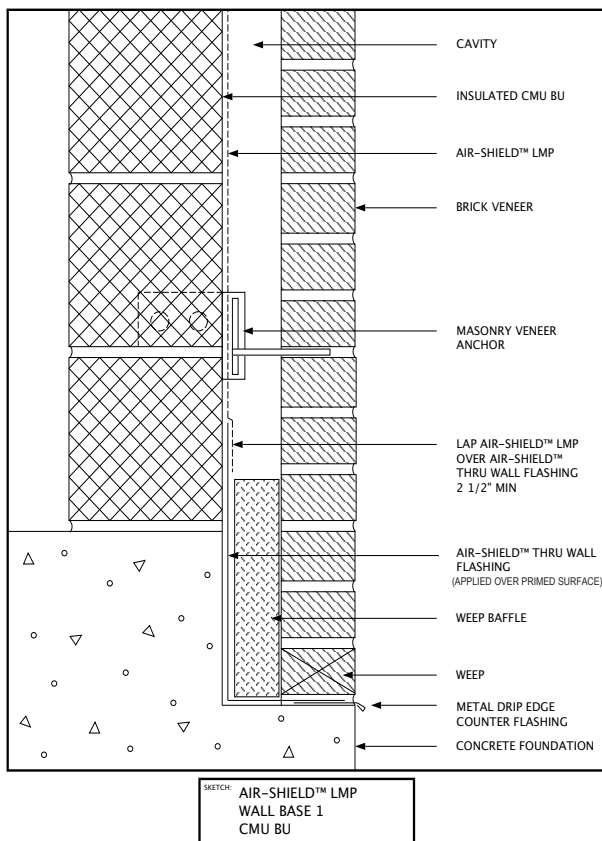
SKETCH: AIR-SHIELD™ LM  
ROOF DETAIL 1  
LGMF BU

## Air Barrier



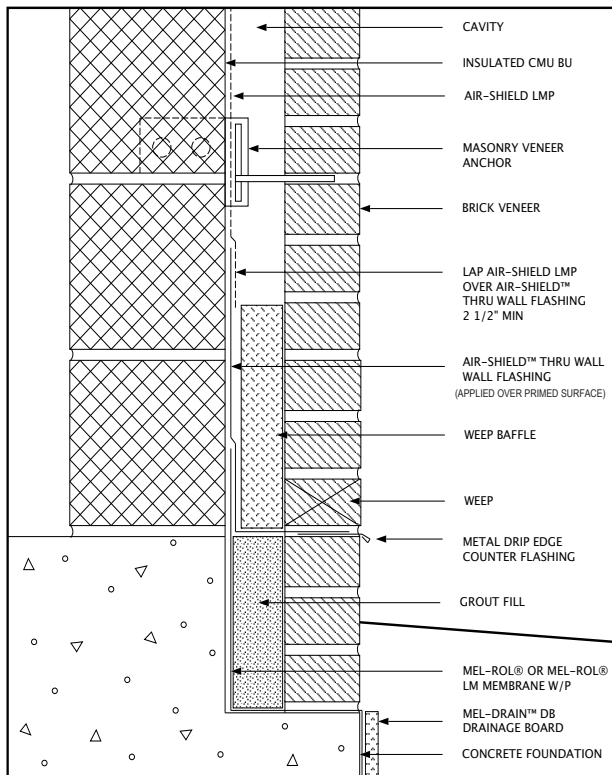


# Air Barriers



Air Barriers

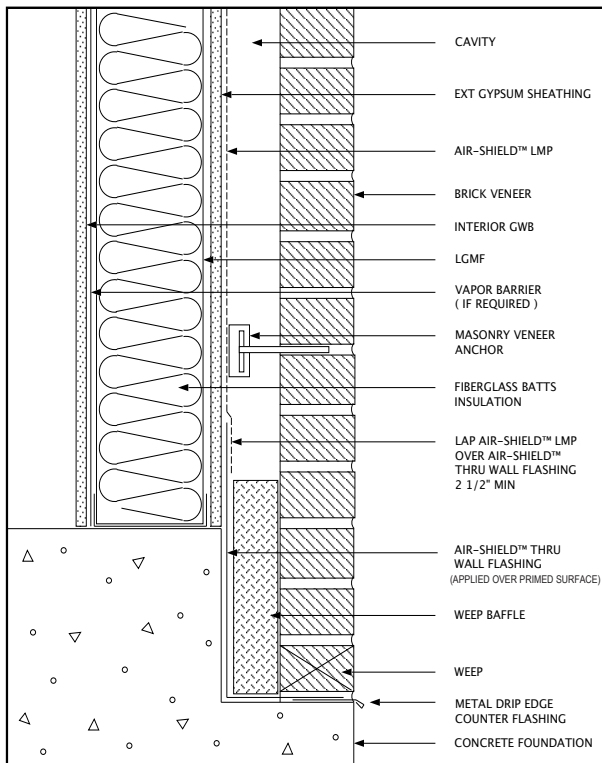




SKETCH: AIR-SHIELD™ LMP  
WALL BASE 2  
CMU BU

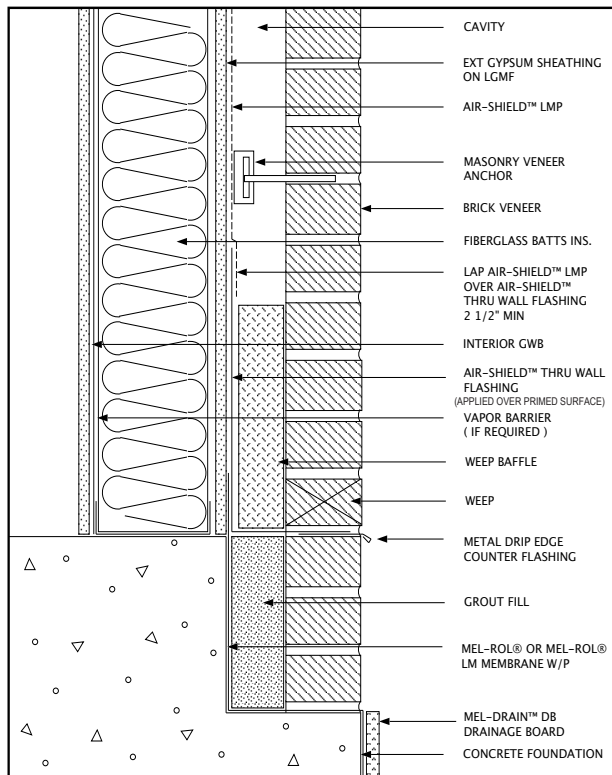






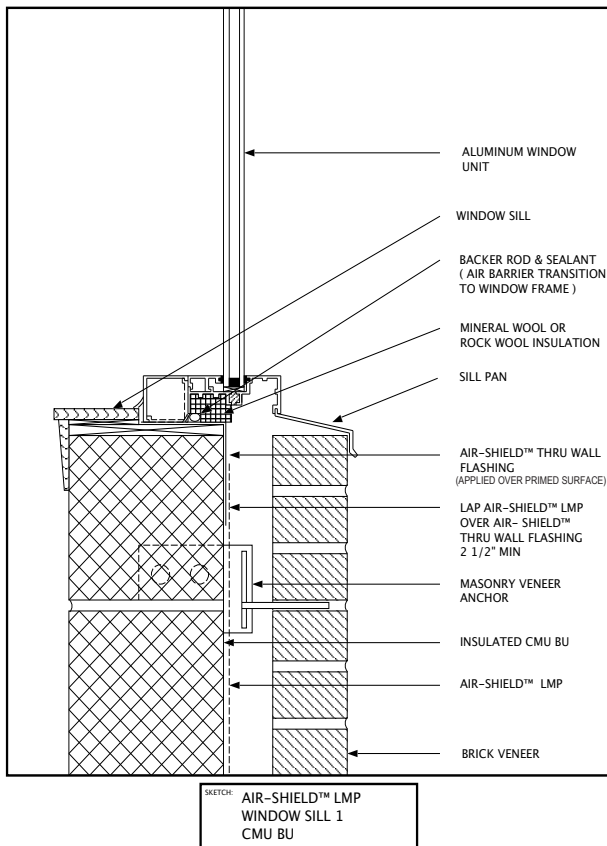
SKETCH: AIR-SHIELD™ LMP  
WALL BASE 3  
LGMF BU

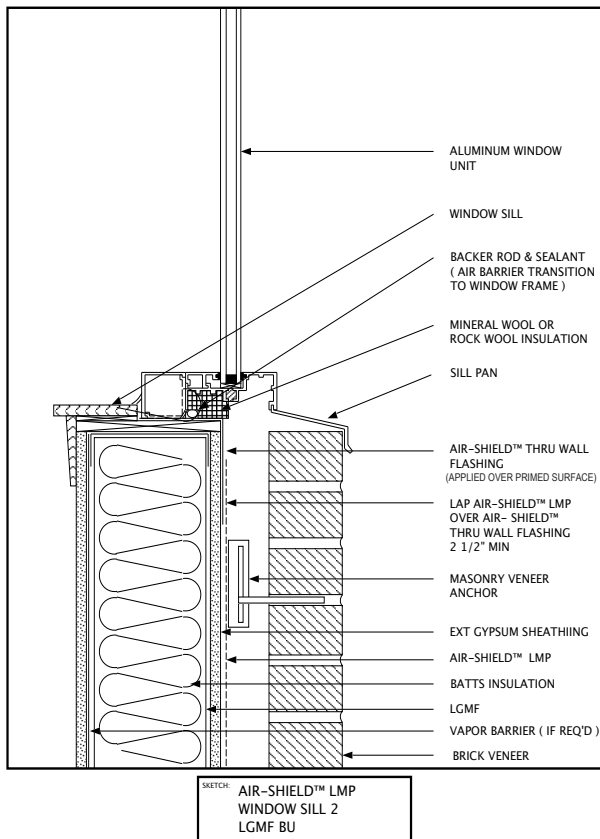


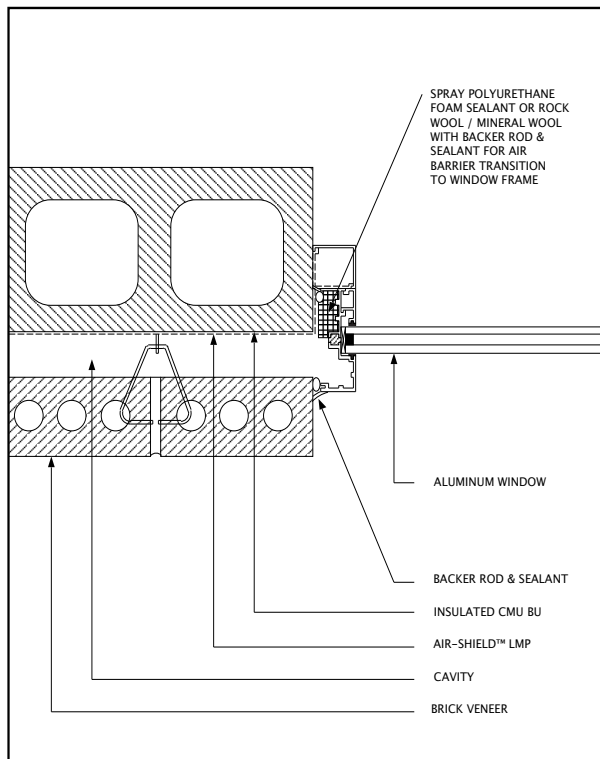


SKETCH: AIR-SHIELD™ LMP  
WALL BASE 4  
LGMF BU





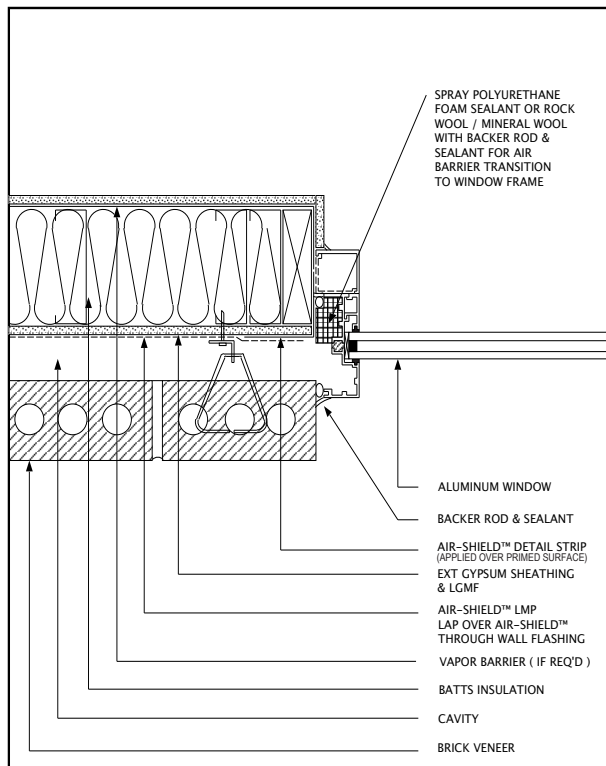




SKETCH: AIR-SHIELD™ LMP  
WINDOW JAMB 1  
CMU BU

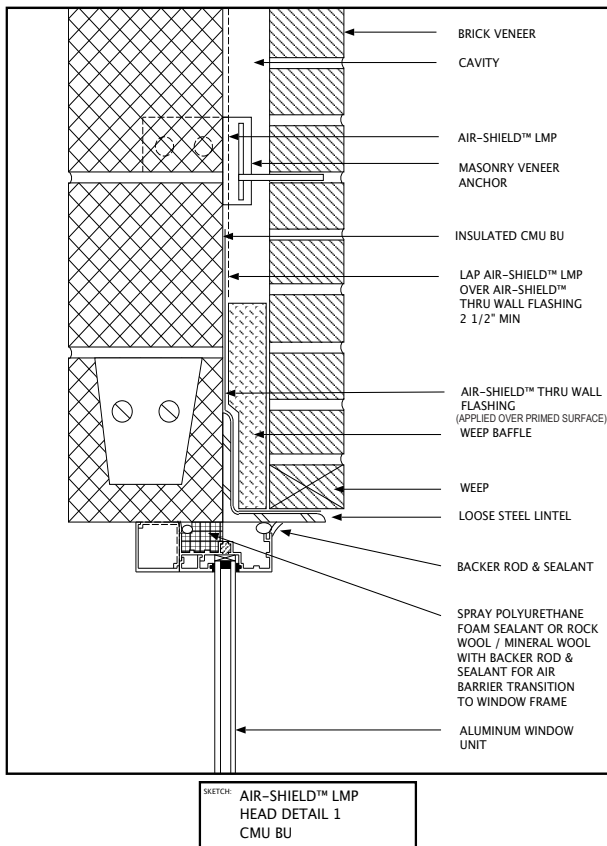


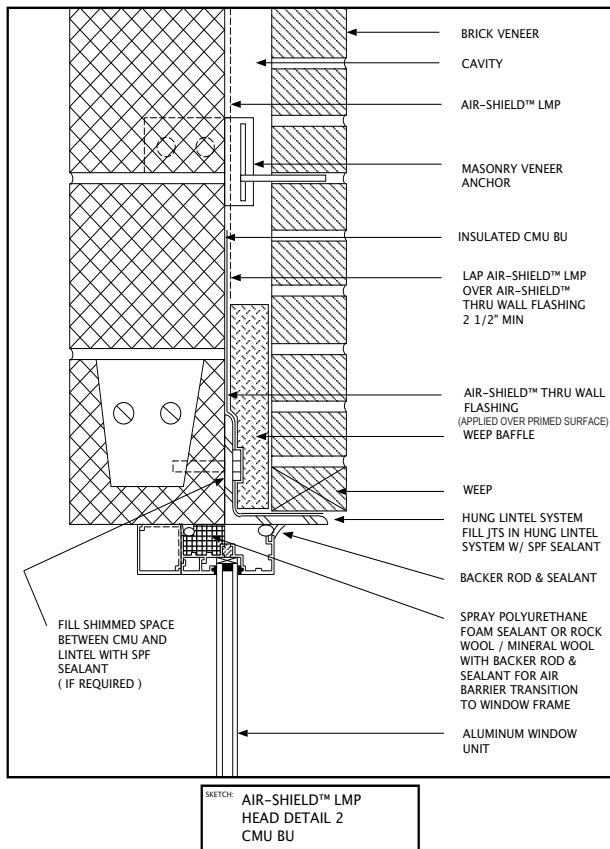
Air Defenders



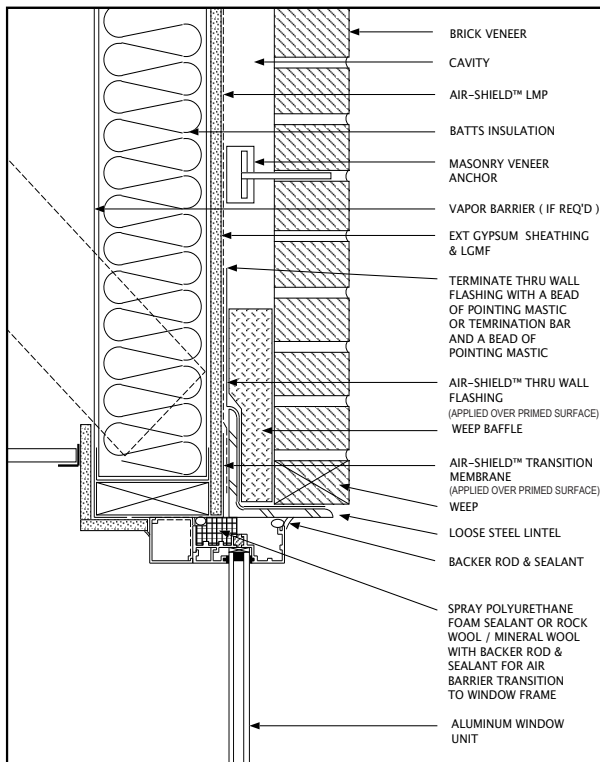
SKETCH: AIR-SHIELD™ LMP  
WINDOW JAMB 2  
LGMF BU







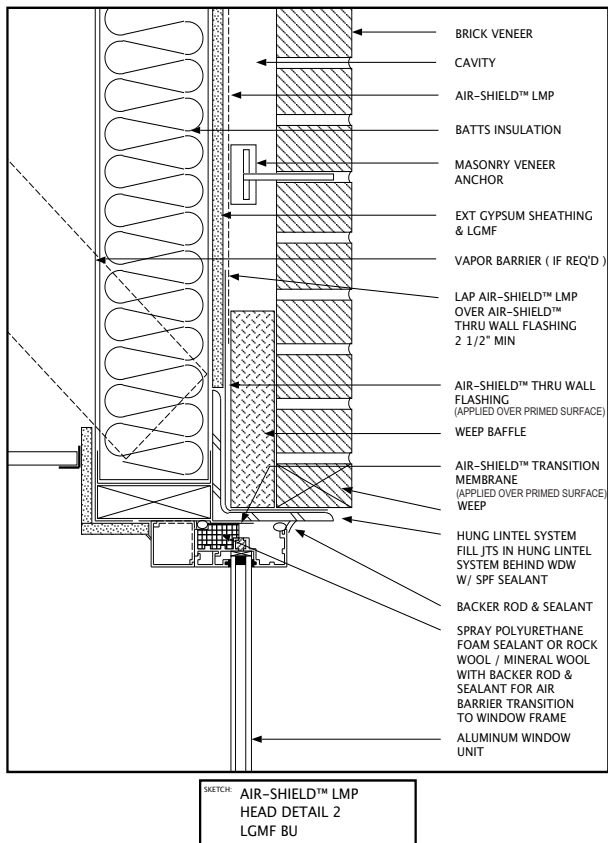


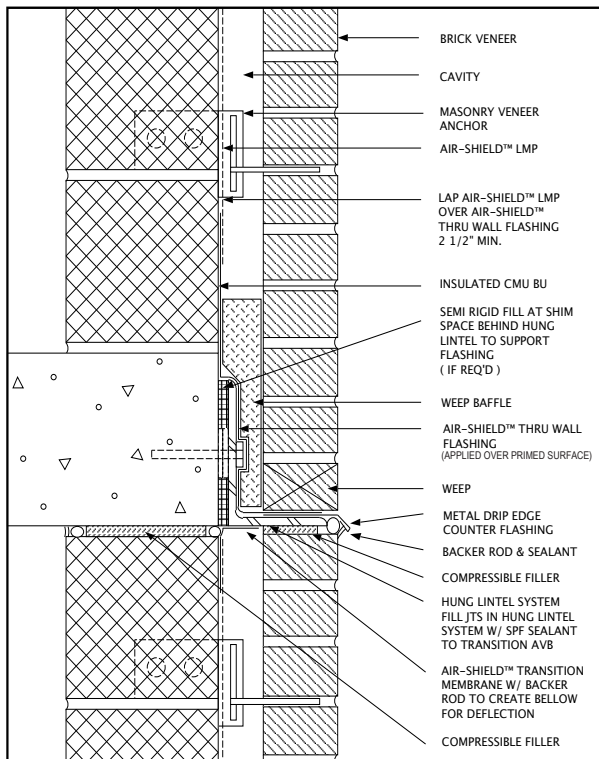


SKETCH: AIR-SHIELD™ LMP  
HEAD DETAIL 1  
LGMF BU



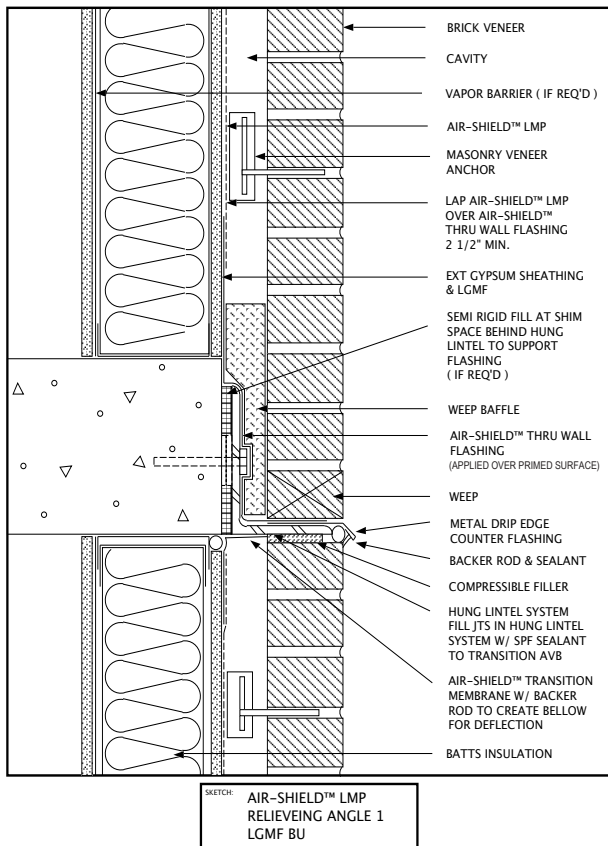
Air Shields

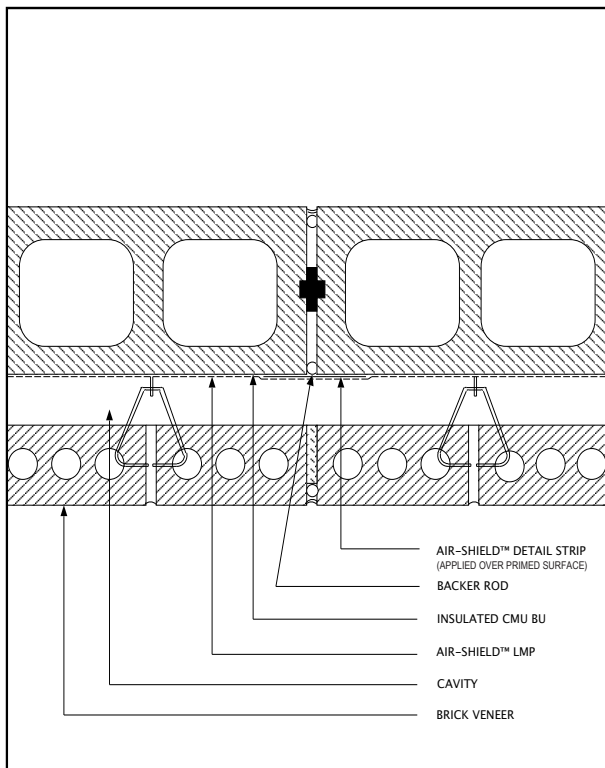




SKETCH: AIR-SHIELD™ LMP  
RELIEVING ANGLE 1  
CMU BU



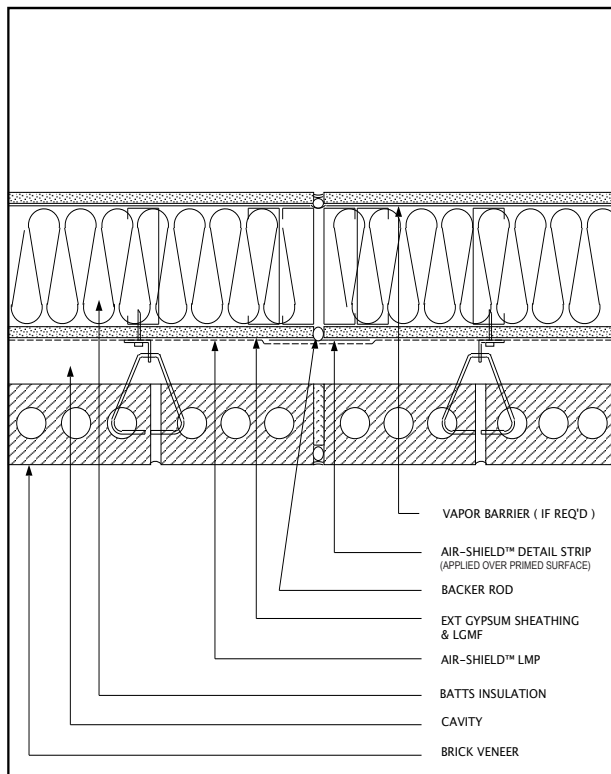




SKETCH: AIR-SHIELD™ LMP  
CONTROL JOINT  
CMU BU



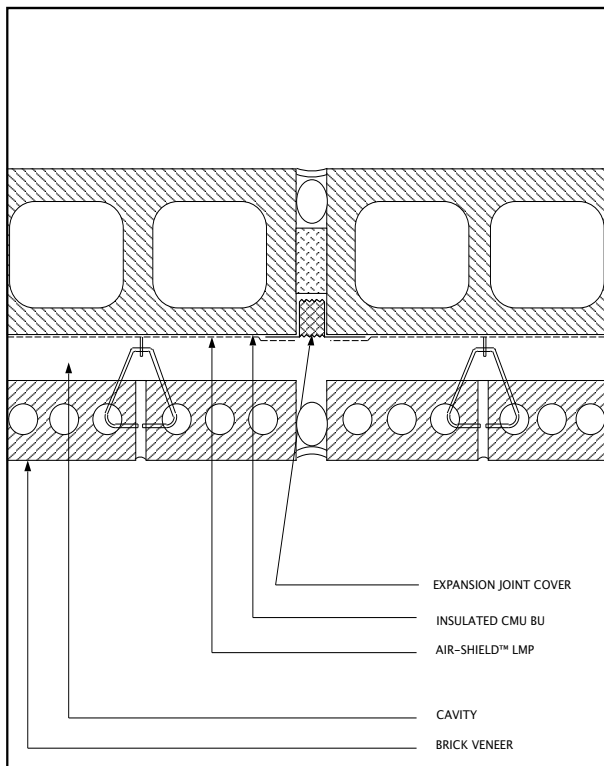
Air Barriers



SKETCH: AIR-SHIELD™ LMP  
CONTROL JOINT  
LGMF BU

Air Barriers

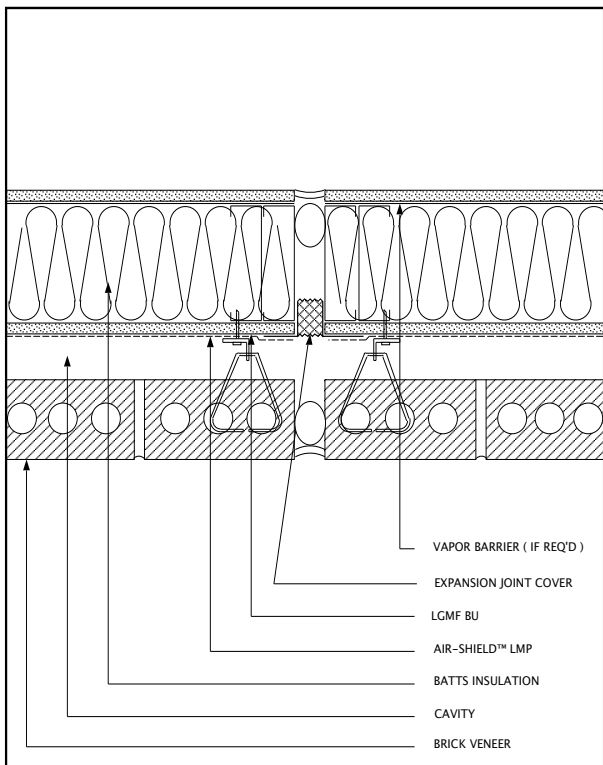




SKETCH:  
AIR-SHIELD™ LMP  
EXPANSION JOINT  
CMU BU



Air Barriers

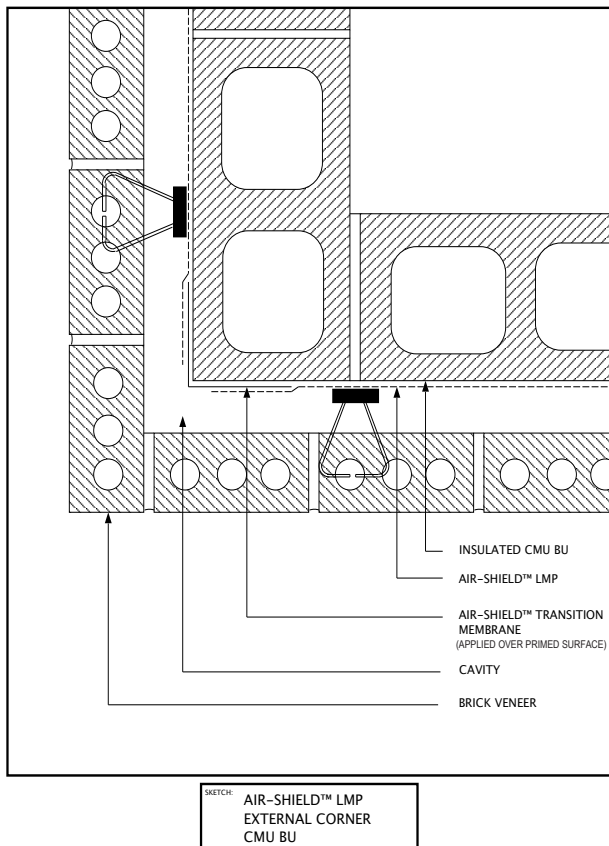


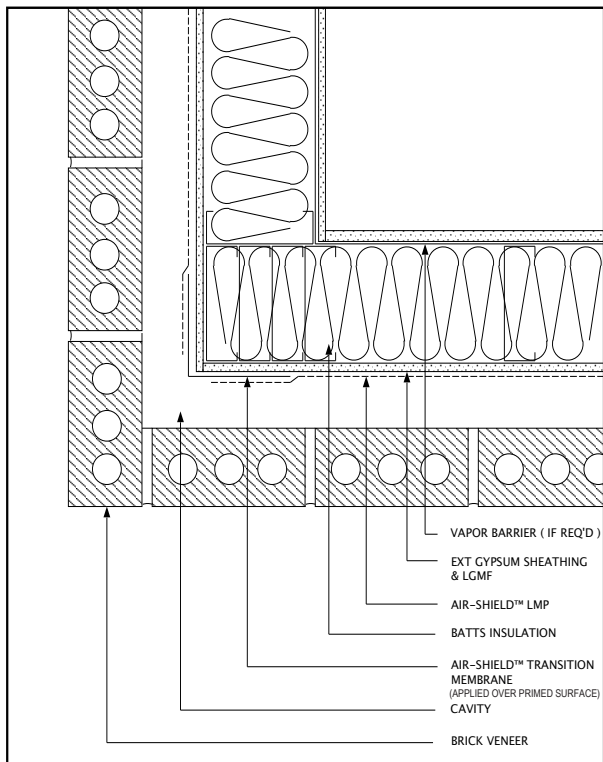
SKETCH:  
AIR-SHIELD™ LMP  
EXPANSION JOINT  
LGMF BU

Air Shields



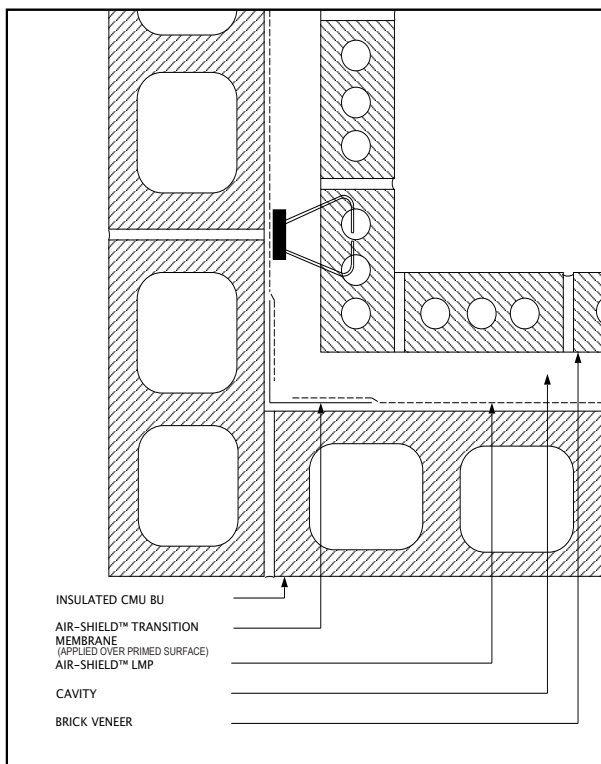






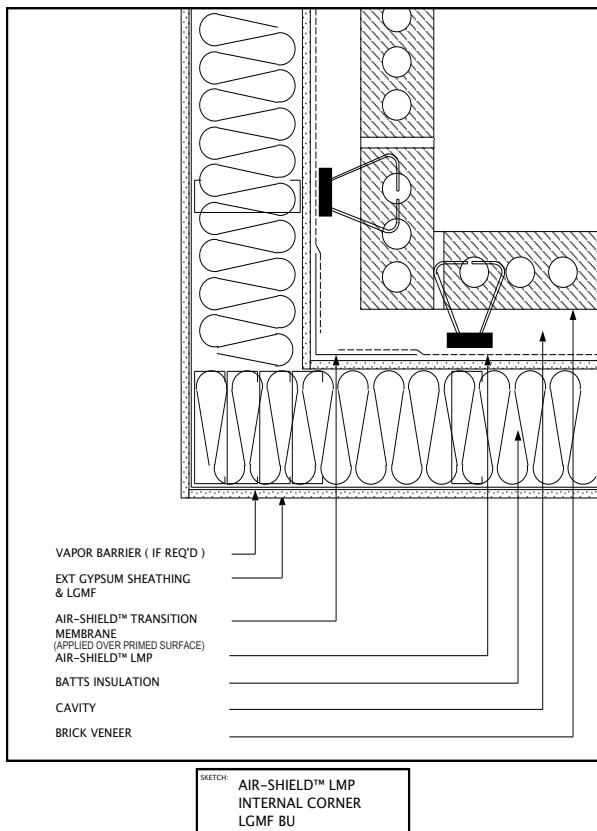
SKETCH: AIR-SHIELD™ LMP  
EXTERNAL CORNER  
LGMF BU





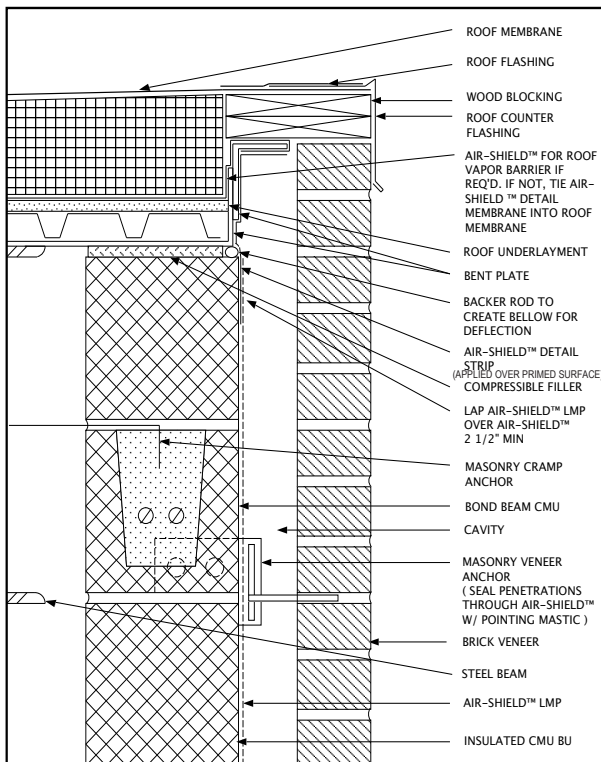
SKETCH: AIR-SHIELD™ LMP  
INTERNAL CORNER  
CMU BU





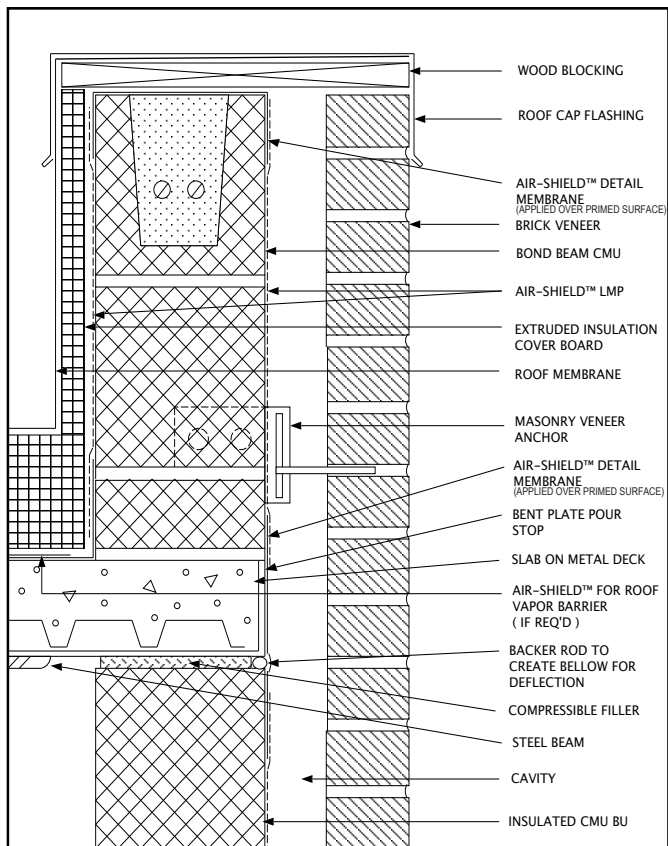
Air Barriers





SKETCH: AIR-SHIELD™ LMP  
ROOF DETAIL 1  
CMU BU

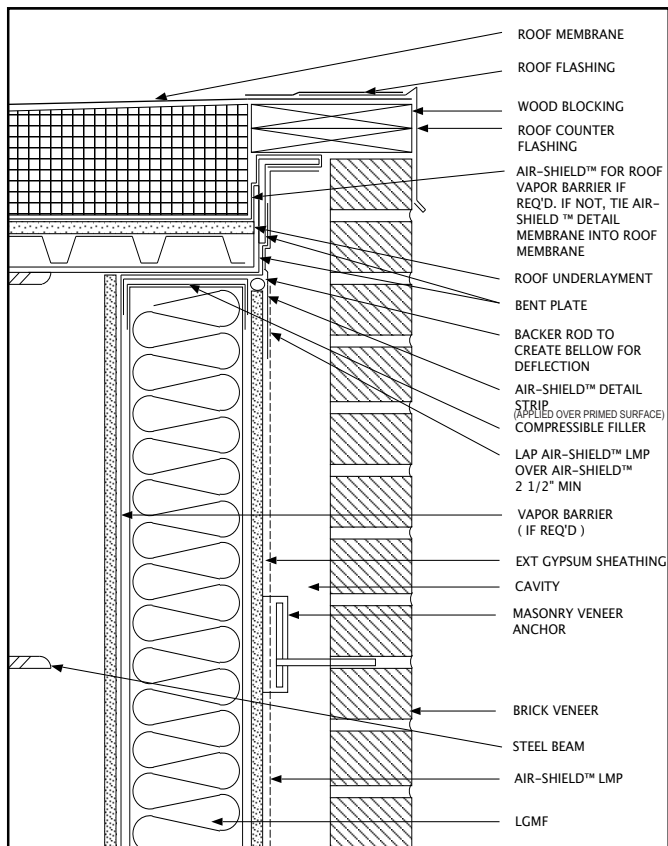




SKETCH: AIR-SHIELD™ LMP  
ROOF DETAIL 2  
CMU BU

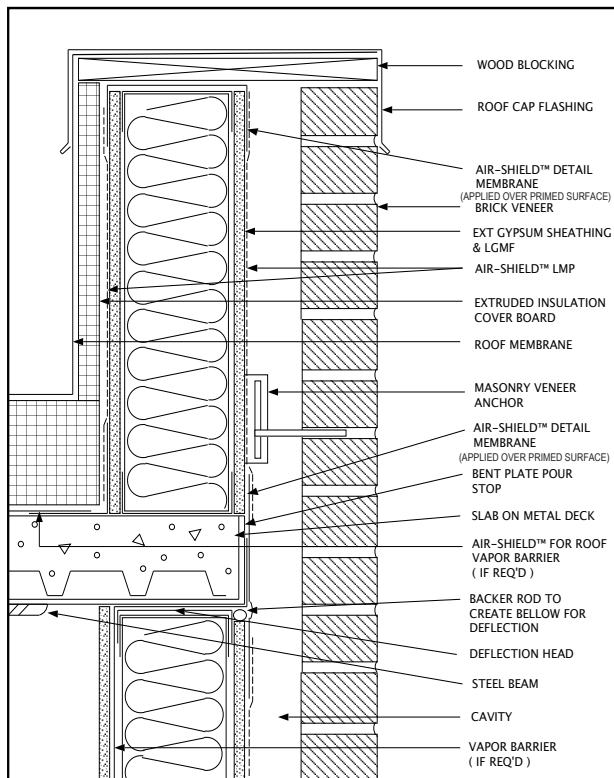
Air Barrier Systems





SKETCH: AIR-SHIELD™ LMP  
ROOF DETAIL 1  
LGMF BU



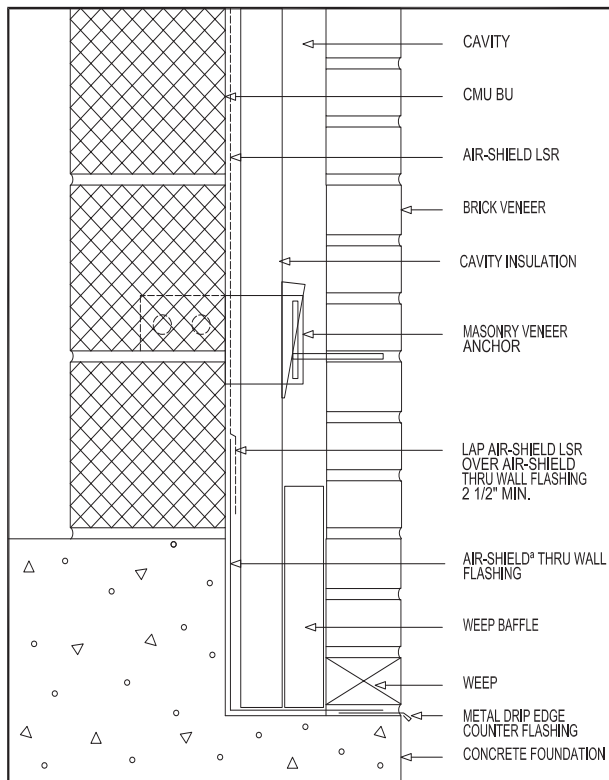


SKETCH: AIR-SHIELD™ LMP  
ROOF DETAIL 2  
LGMF BU

Air Barriers

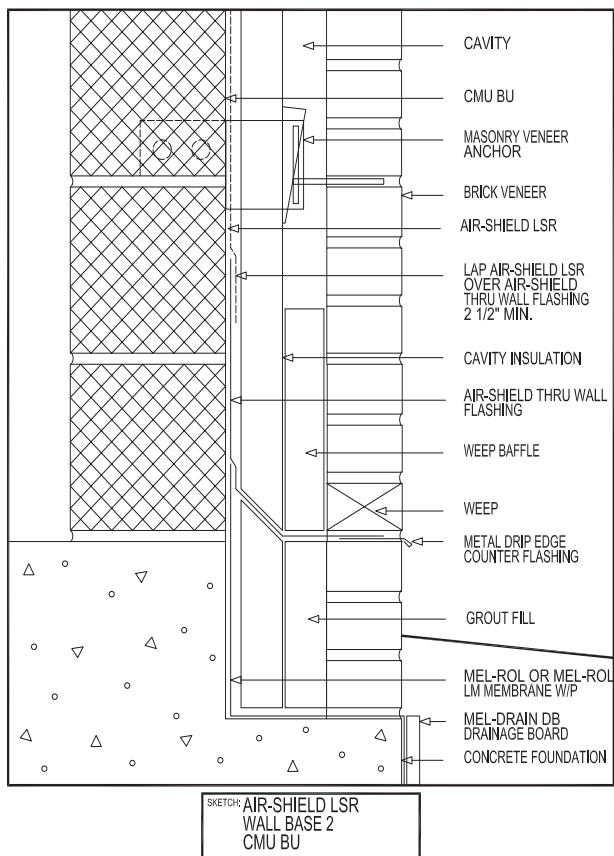






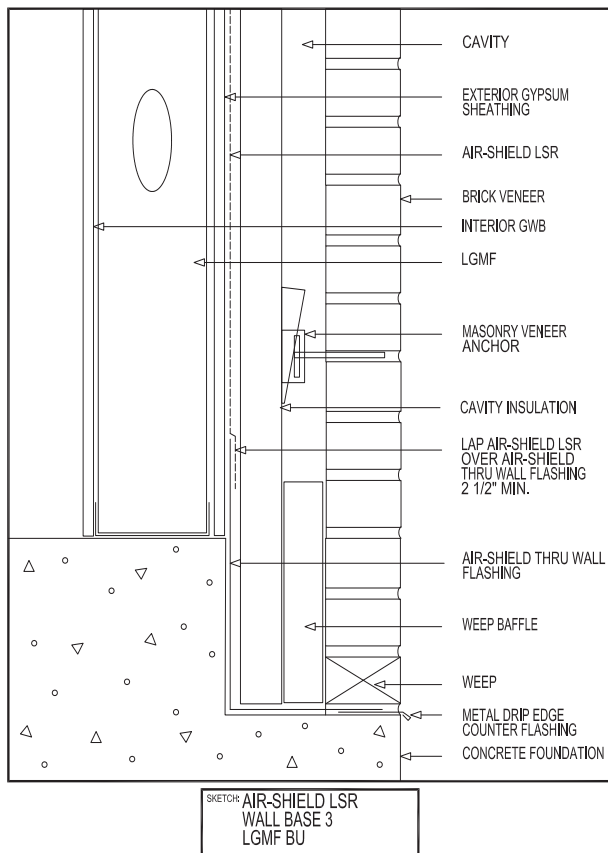
SKETCH: AIR-SHIELD LSR  
WALL BASE 1  
CMU BU

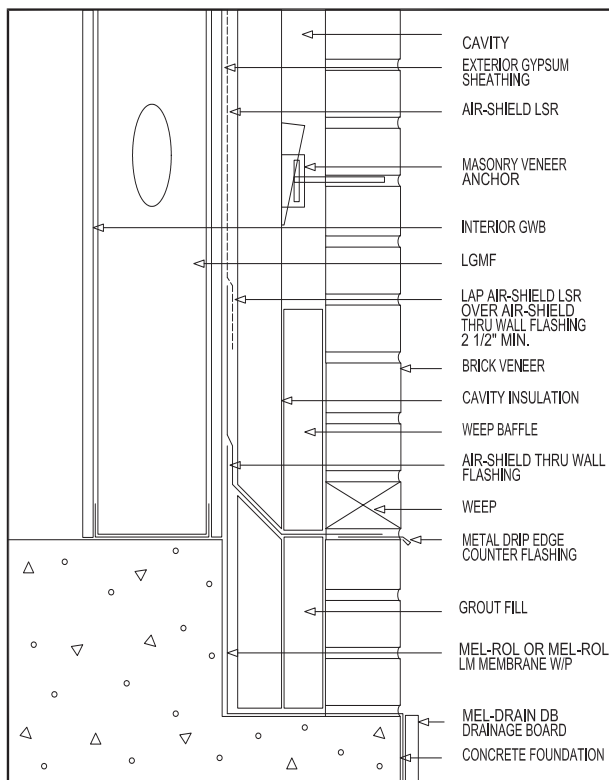




Air Barriers



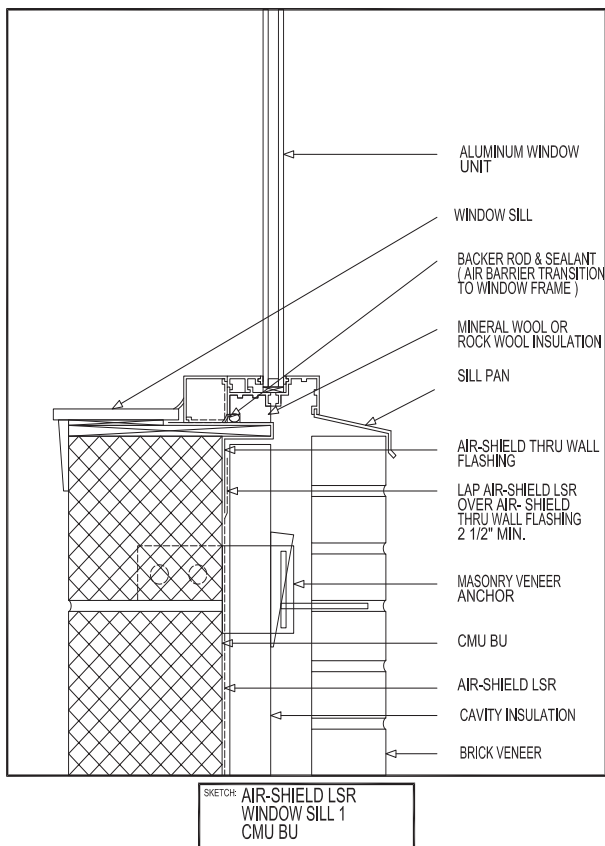




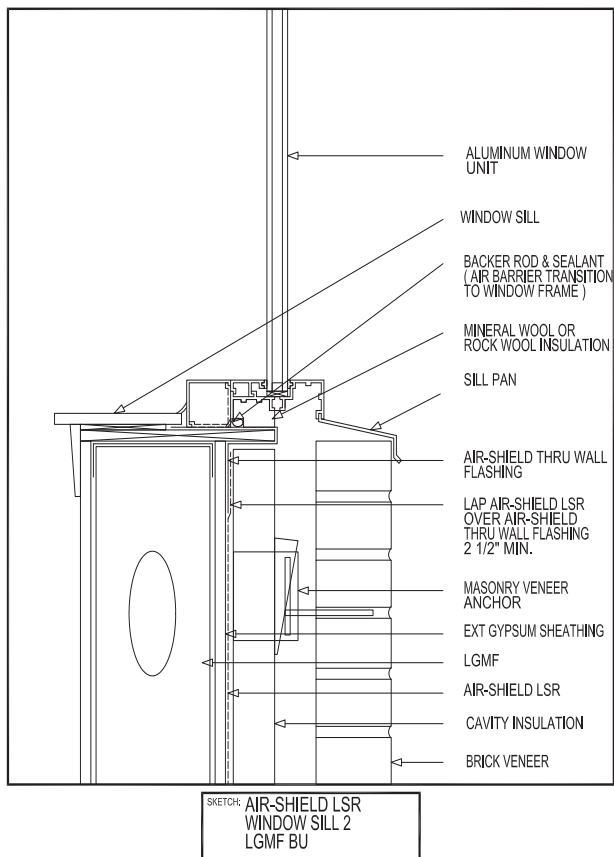
SKETCH: AIR-SHIELD LSR  
WALL BASE 4  
LGMF BU

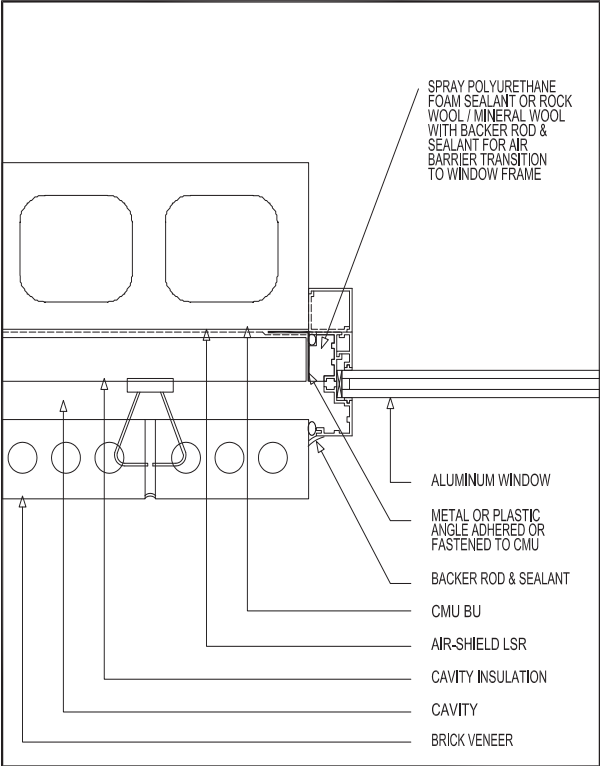
Air Barrier





## Air Barriers

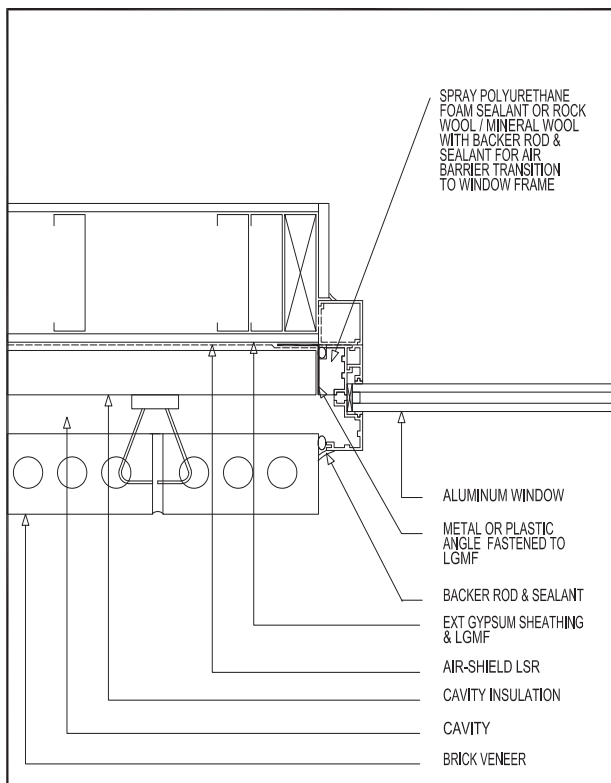




SKETCH: AIR-SHIELD LSR WINDOW JAMB 1 CMU BU



Air Barriers

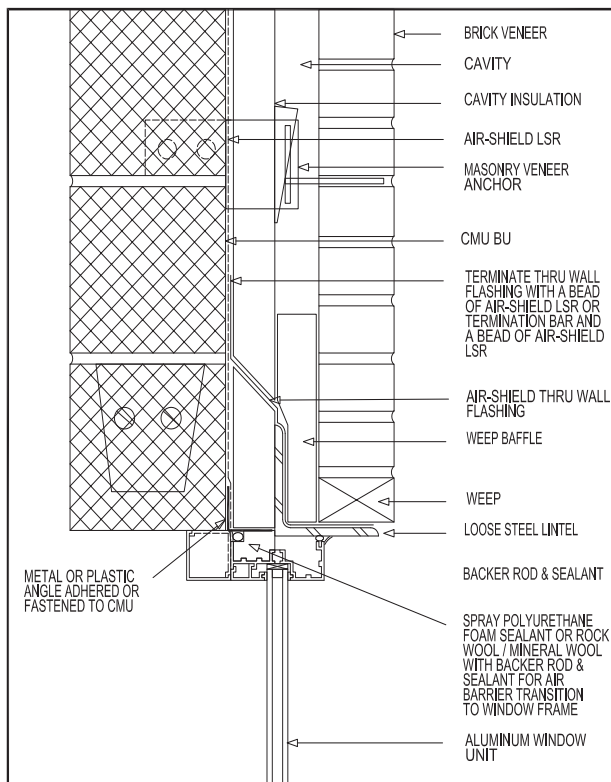


SKETCH: AIR-SHIELD LSR  
WINDOW JAMB 2  
LGMF BU

Air Barrier

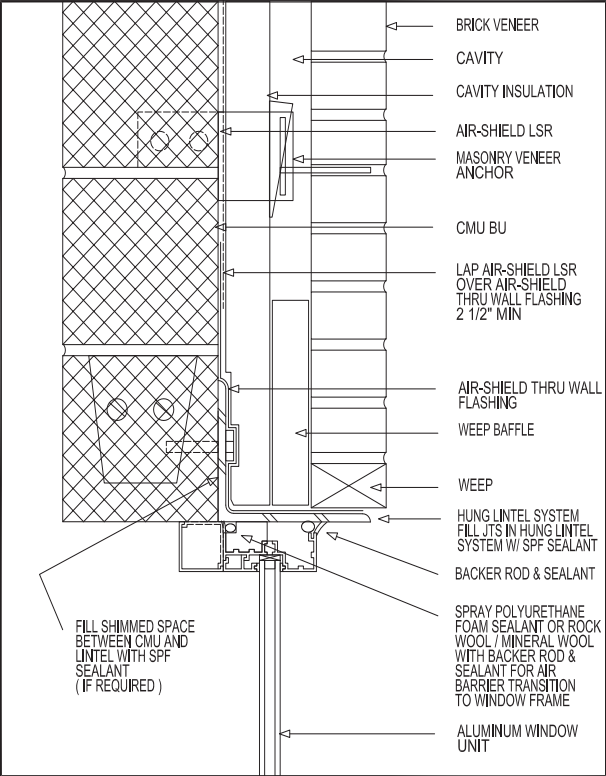






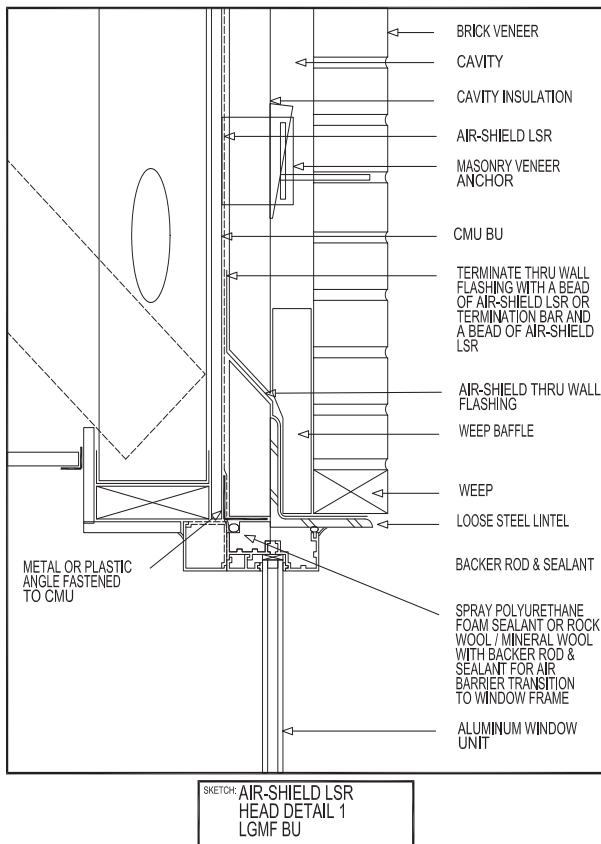
SKETCH: AIR-SHIELD LSR  
HEAD DETAIL 1  
CMU BU



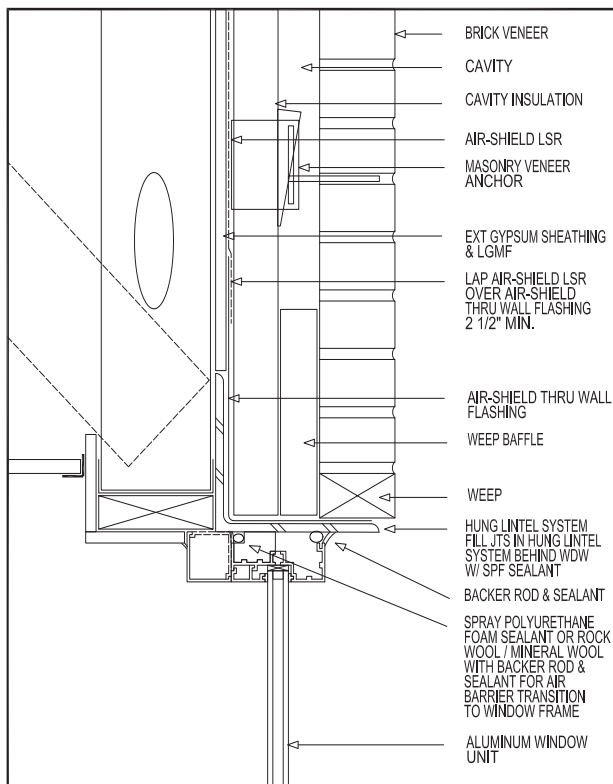


SKETCH: AIR-SHIELD LSR  
HEAD DETAIL 2  
CMU BU





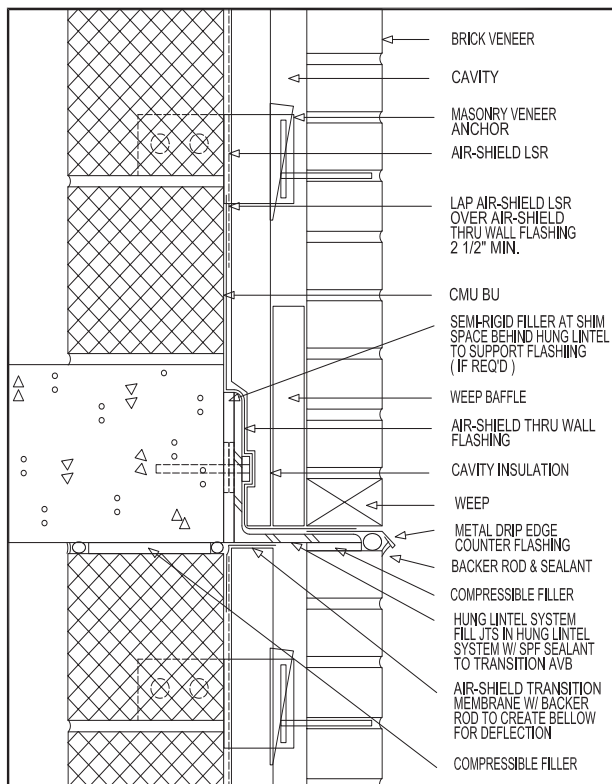
# Barriers



SKETCH: AIR-SHIELD LSR  
HEAD DETAIL 2  
LGMF BU

Air Barrier

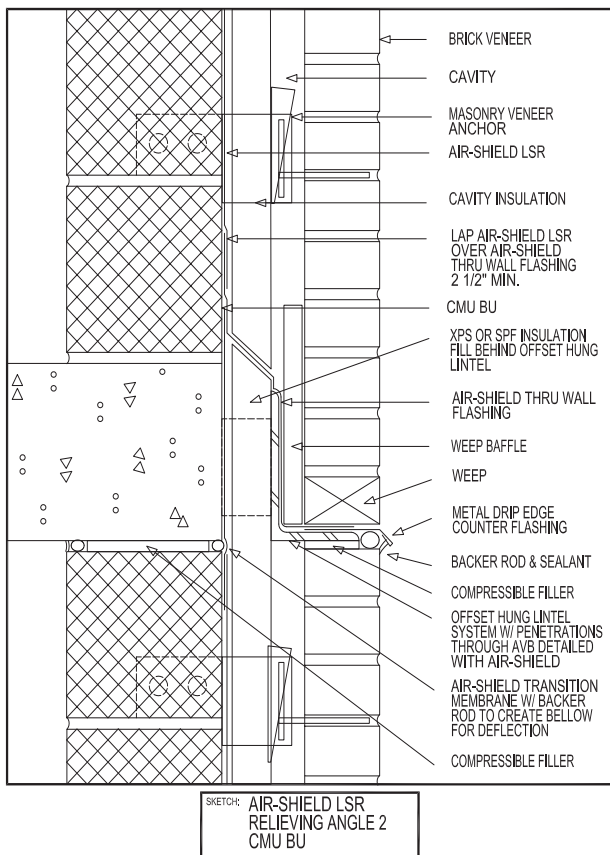




SKETCH: AIR-SHIELD LSR  
RELIEVING ANGLE 1  
CMU BU

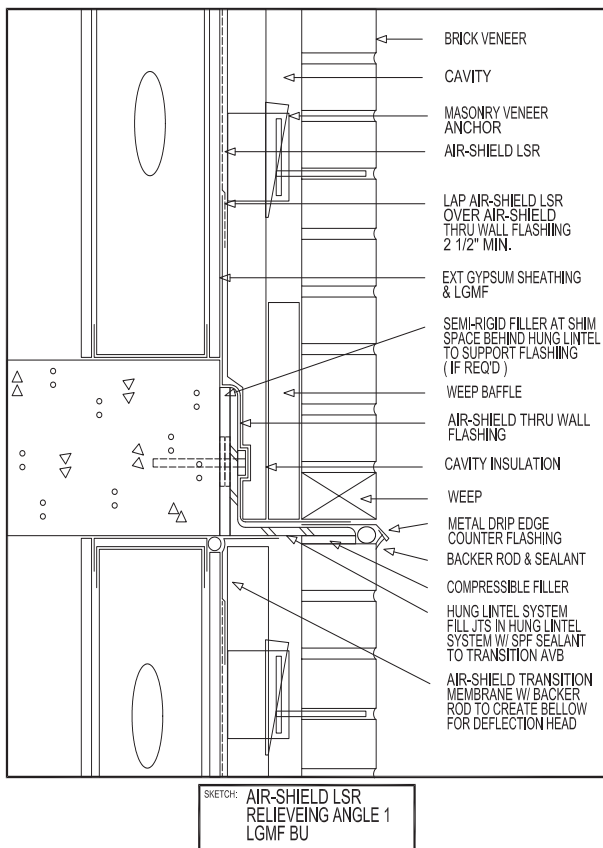


## Barriers

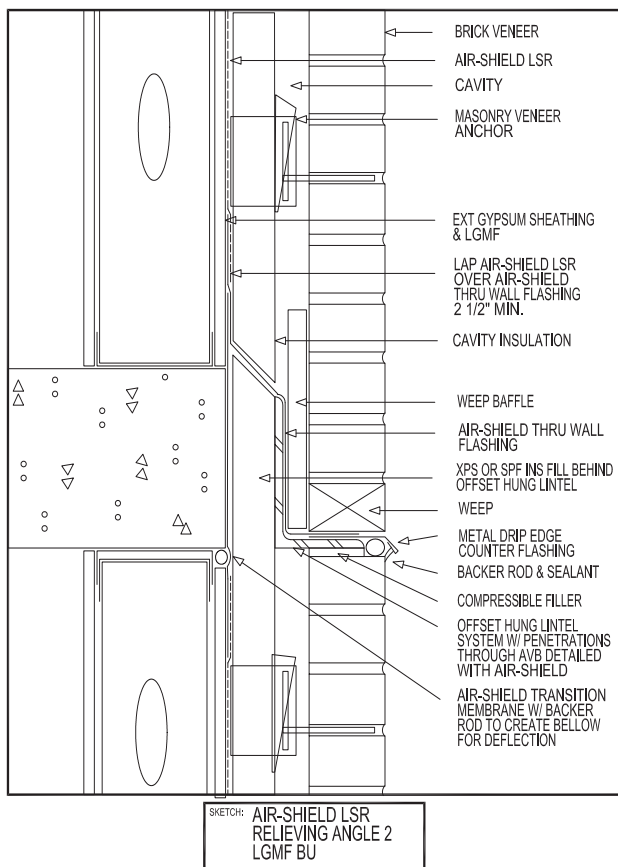


# Air Barrier





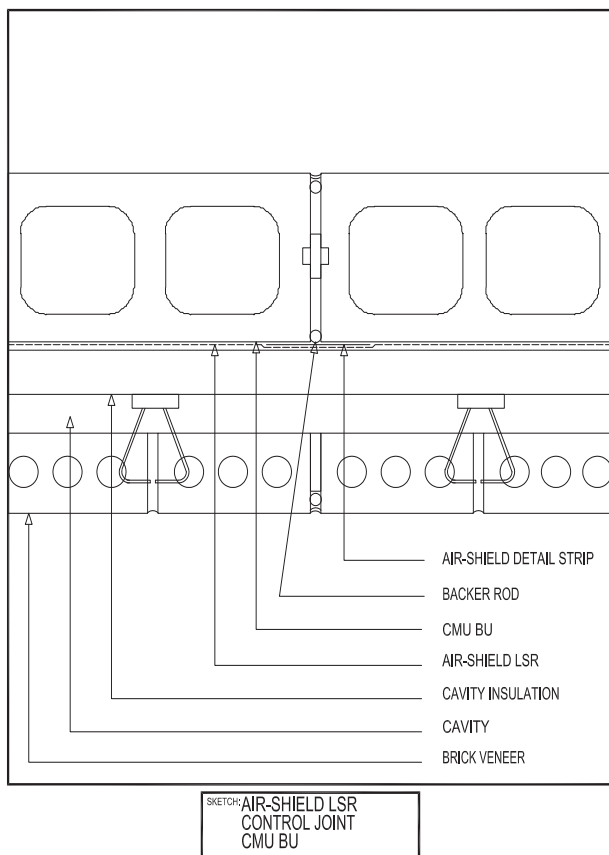
## Barriers



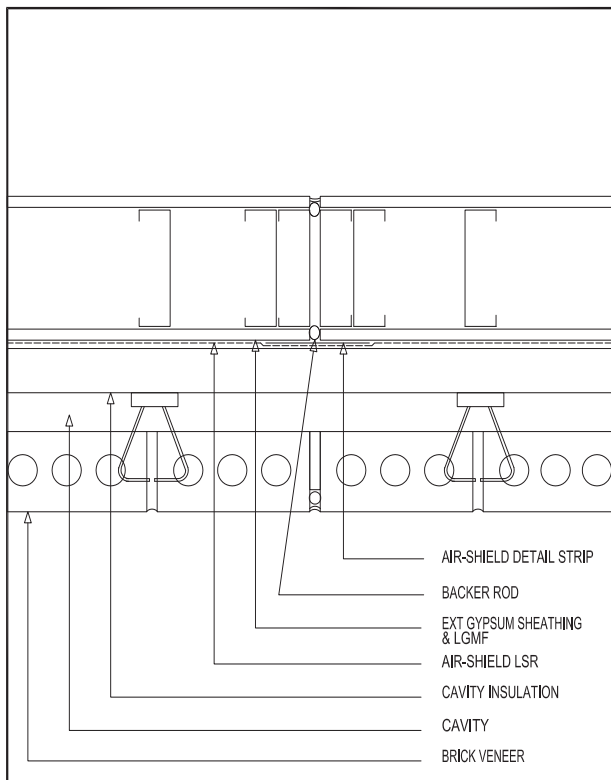
# Air Barrier







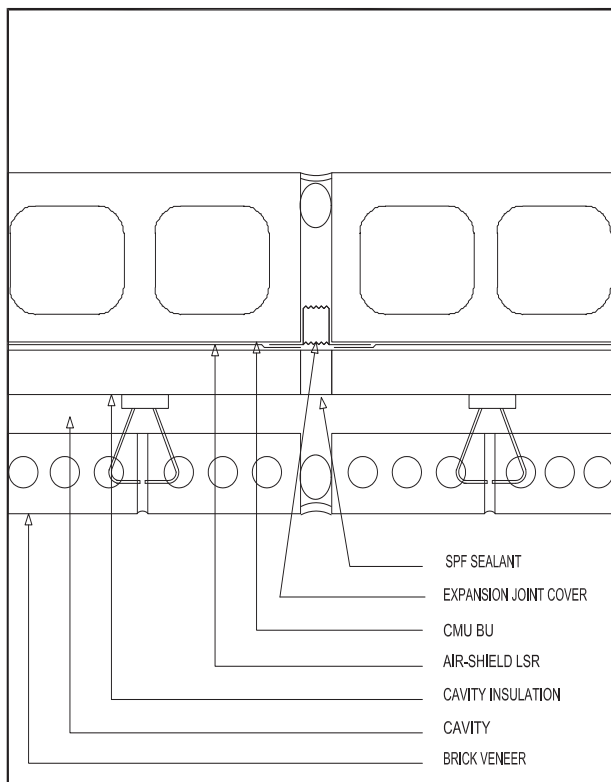
# Barriers



SKETCH: AIR-SHIELD LSR  
CONTROL JOINT  
LGMF BU

Air Barrier

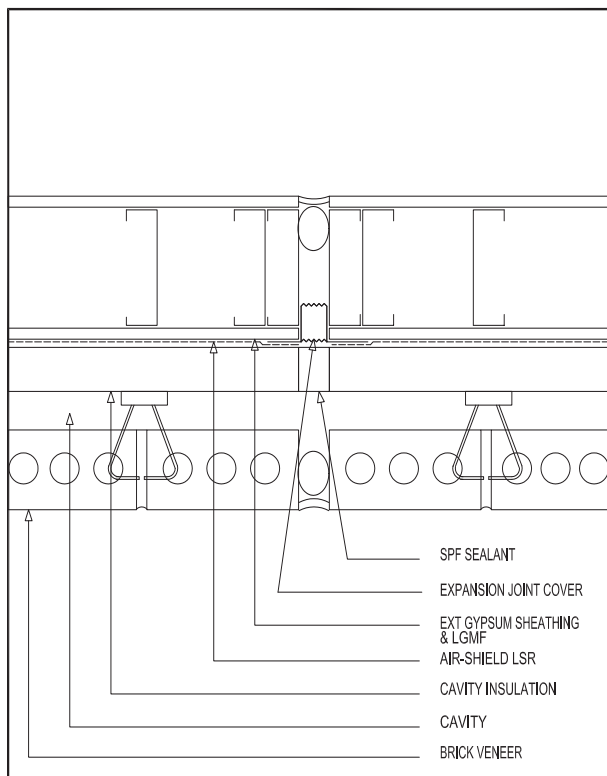




SKETCH: AIR-SHIELD LSR  
EXPANSION JOINT  
CMU BU



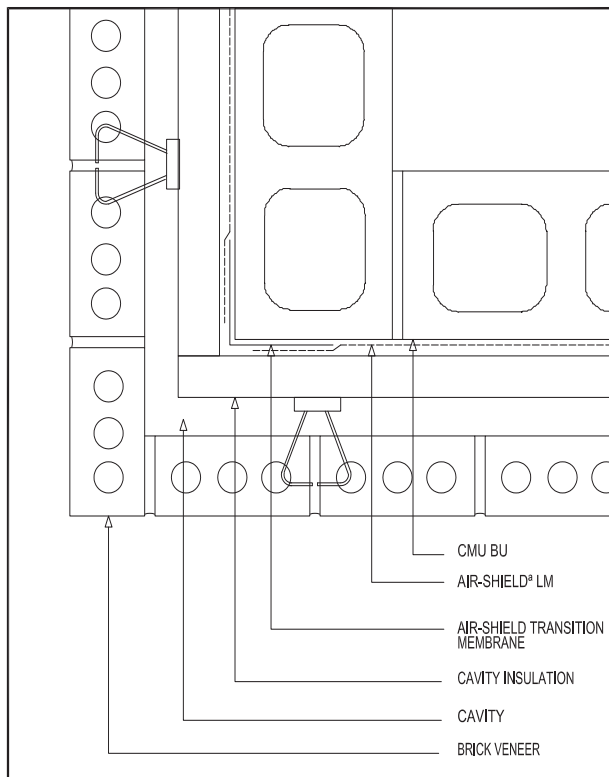
## Barriers



SKETCH: AIR-SHIELD LSR  
EXPANSION JOINT  
LGMF BU

Air Barrie

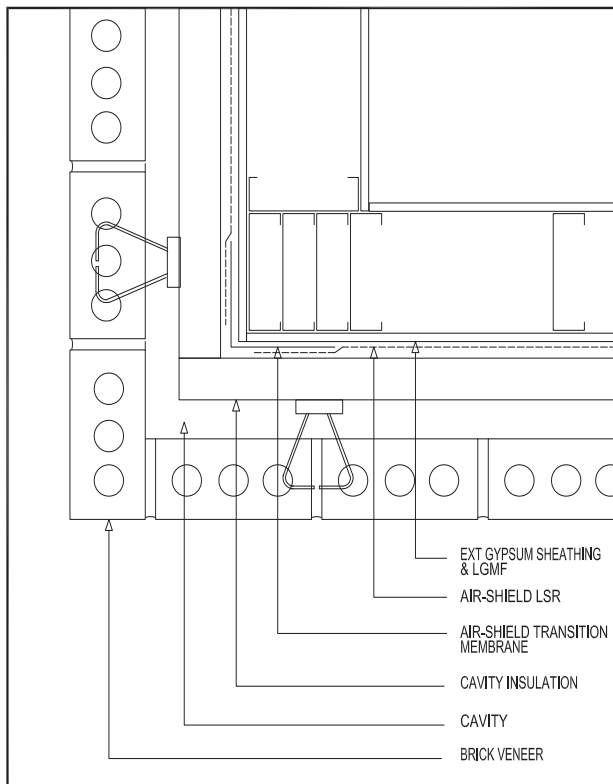




SKETCH: AIR-SHIELD LSR  
EXTERNAL CORNER  
CMU BU



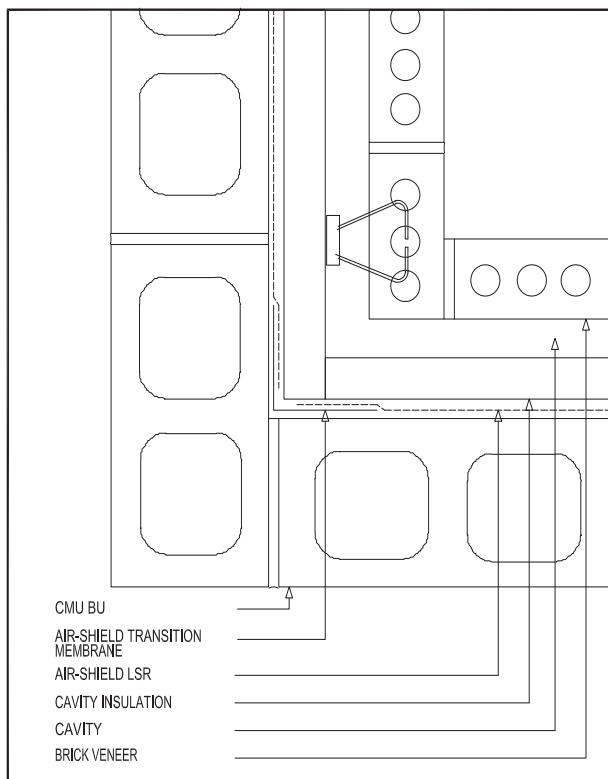
ir Barriers



SKETCH: AIR-SHIELD LSR  
EXTERNAL CORNER  
CMU BU

Air Barrier

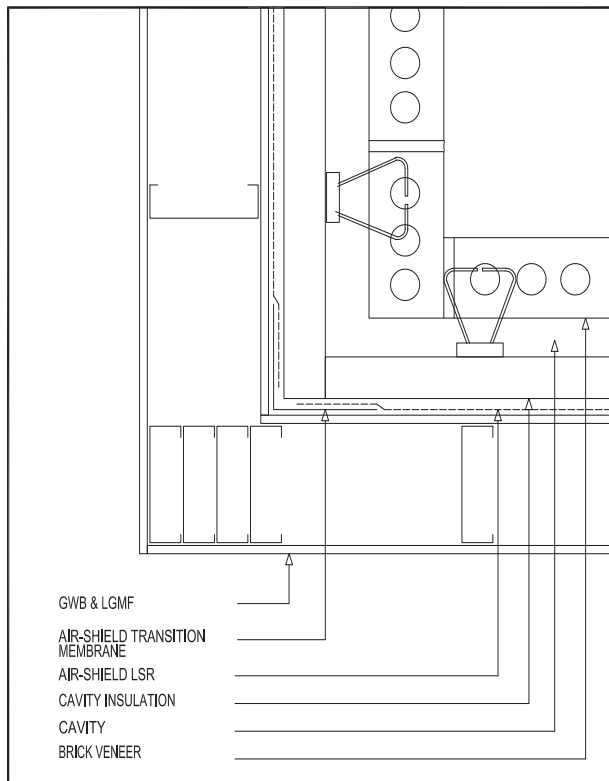




SKETCH: AIR-SHIELD LSR  
INTERNAL CORNER  
CMU BU



ir Barriers

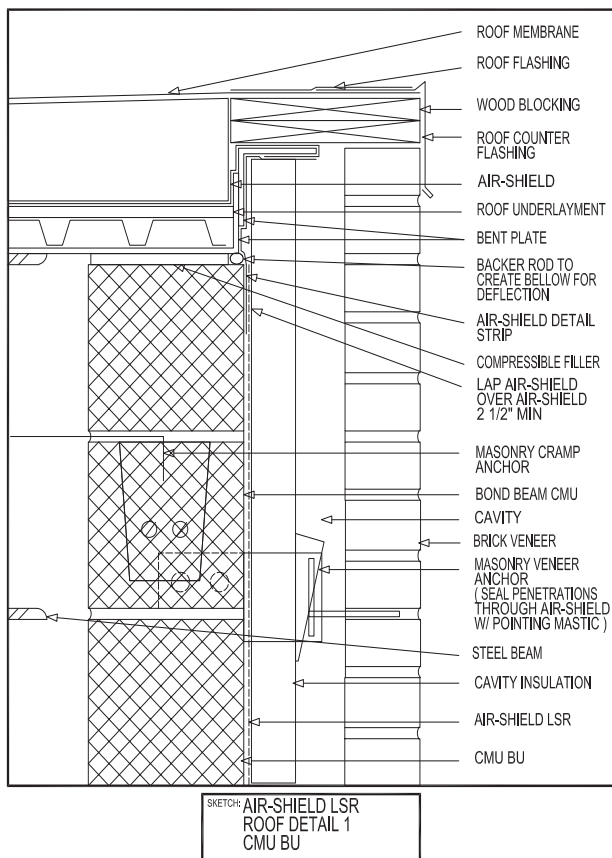


SKETCH: AIR-SHIELD LSR  
INTERNAL CORNER  
LGMF BU

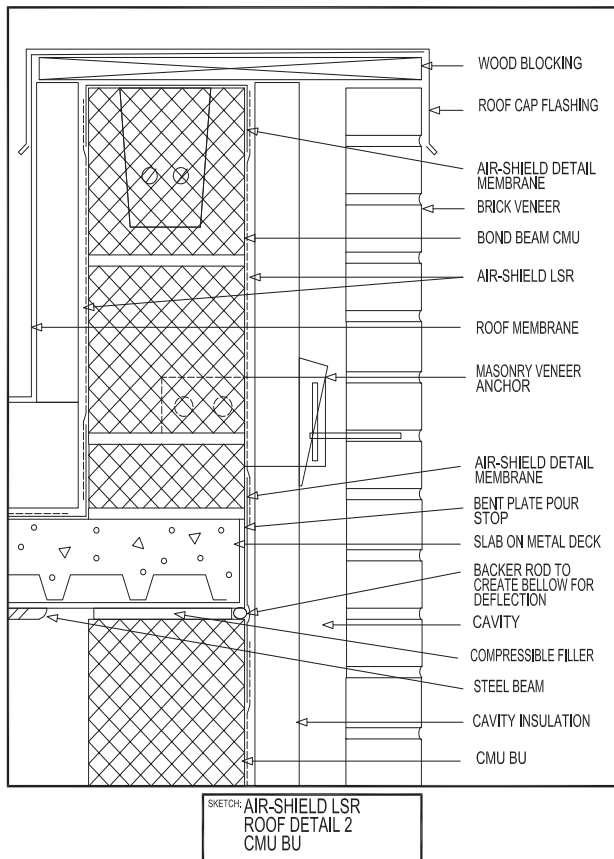
Air Barrier





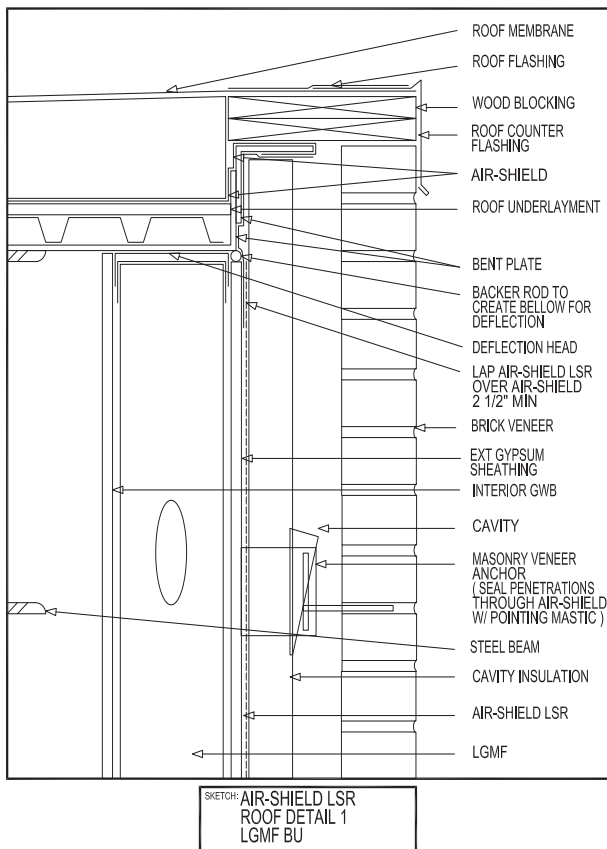


# ir Barriers

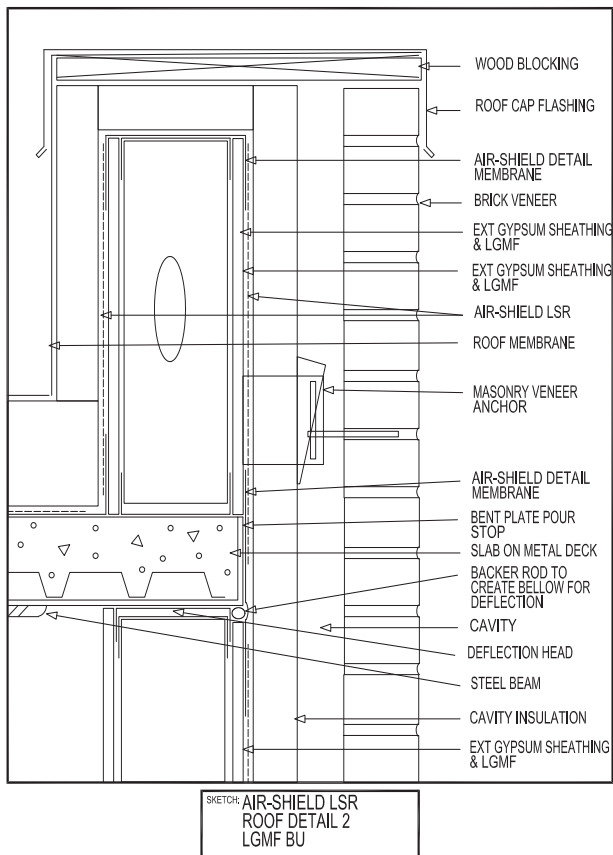


# Air Barrier



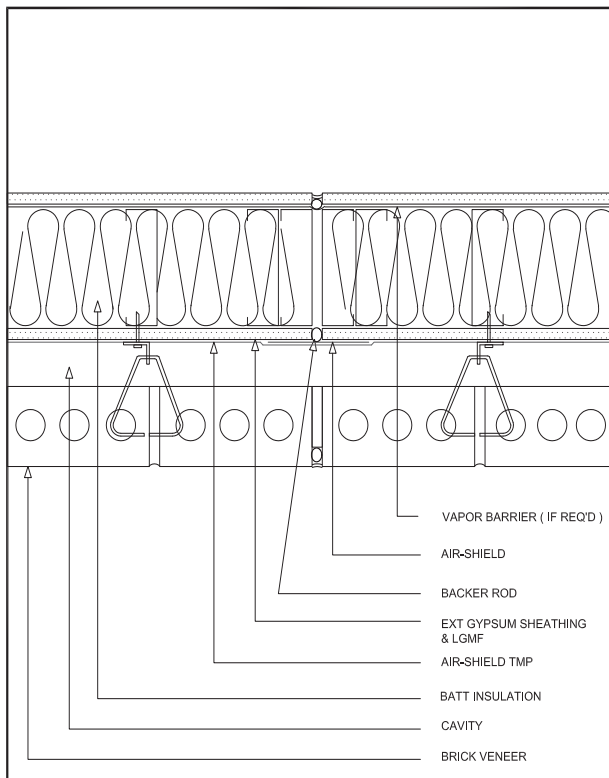


# Air Barriers



# Air Barrier

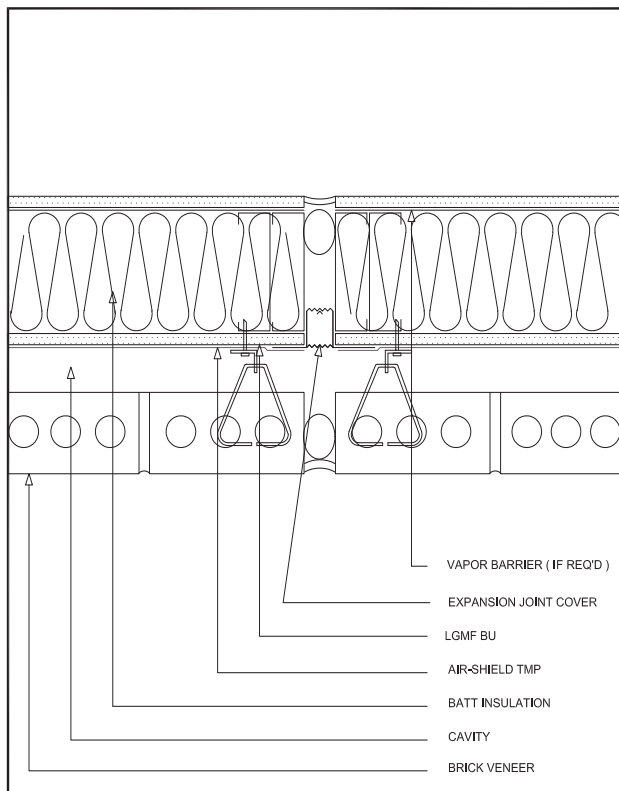




SKETCH: AIR-SHIELD TMP  
CONTROL JOINT  
LGMF BU



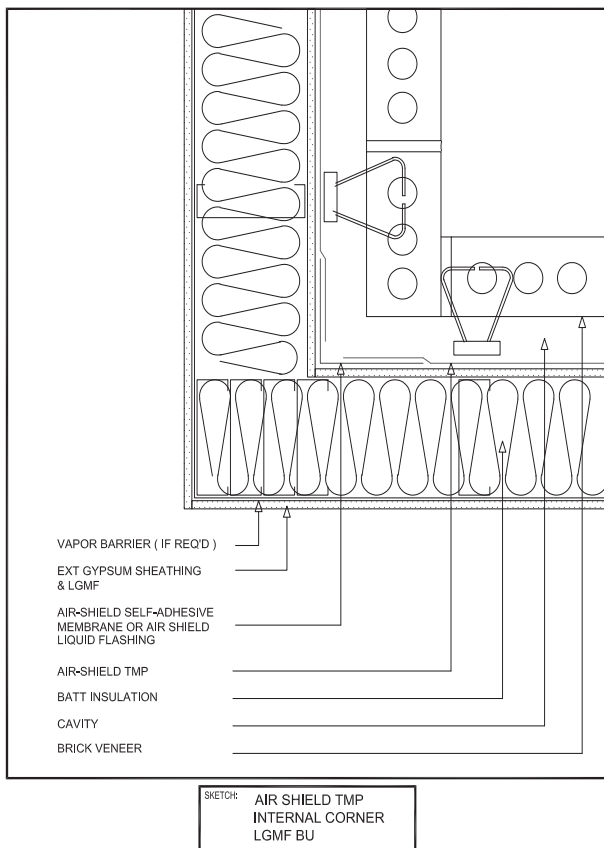
## Air Barriers



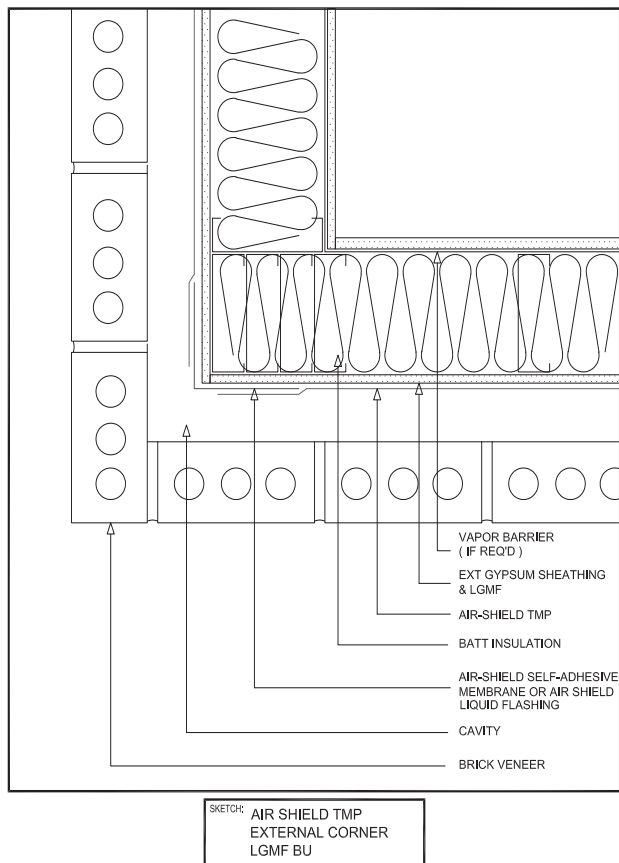
SKETCH:  
AIR SHIELD TMP  
EXPANSION JOINT  
LGMF BU

Air Barriers





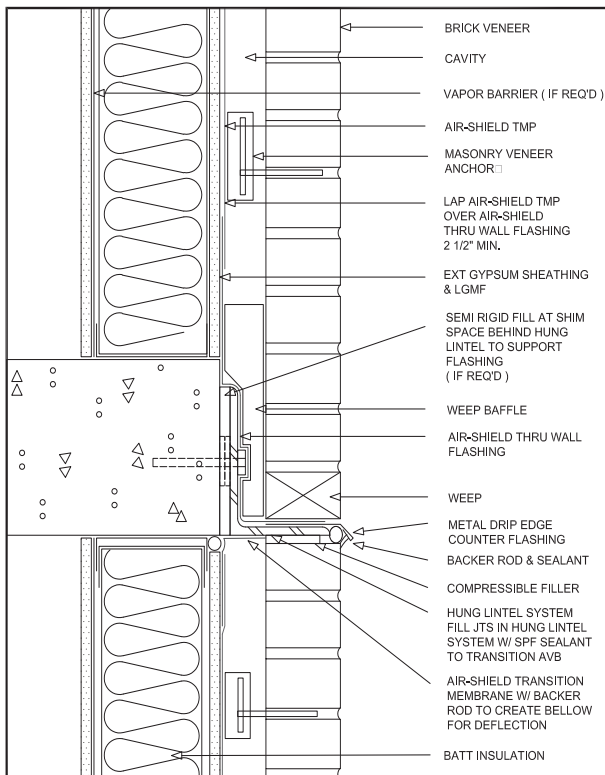
## Air Barriers



# Air Barriers



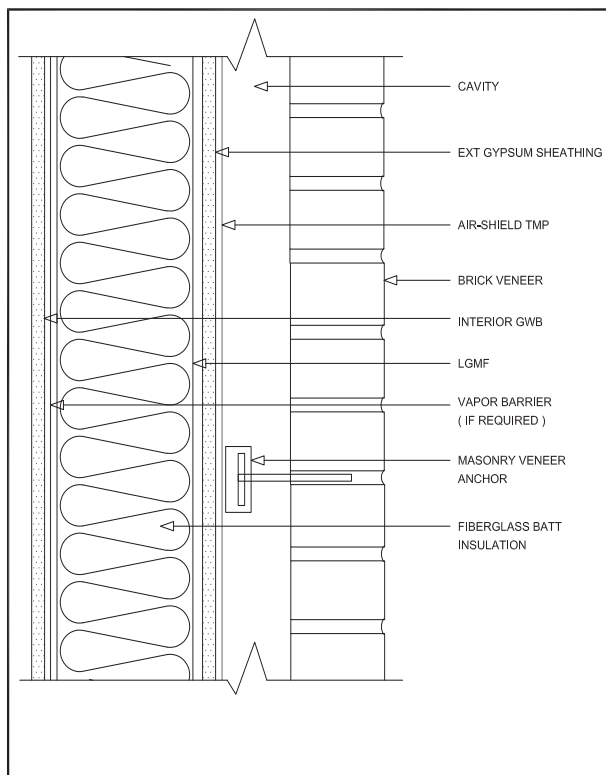




SKETCH: AIR-SHIELD TMP  
RELIEVING ANGLE  
LGMF BU



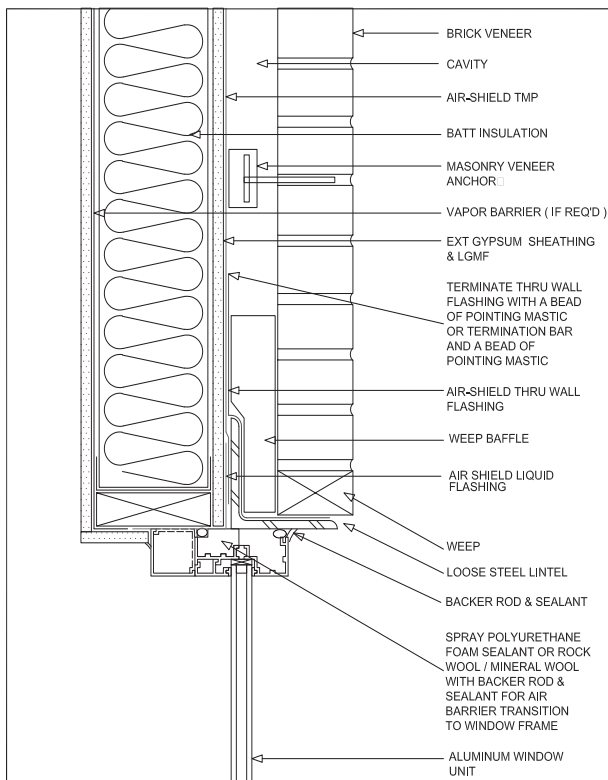
## Air Barriers



SKETCH:  
AIR SHIELD TMP STANDARD  
WALL (N.T.S.)

Air Barriers

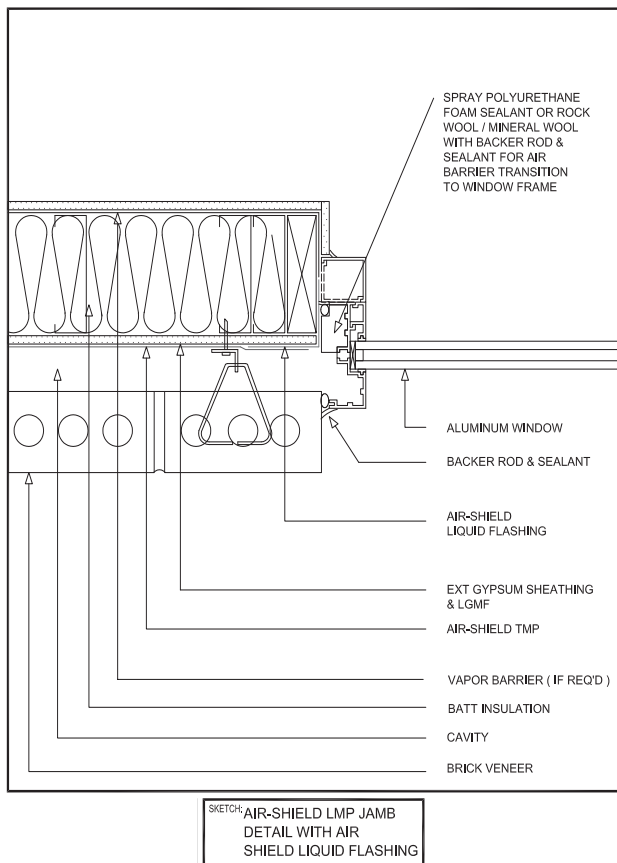


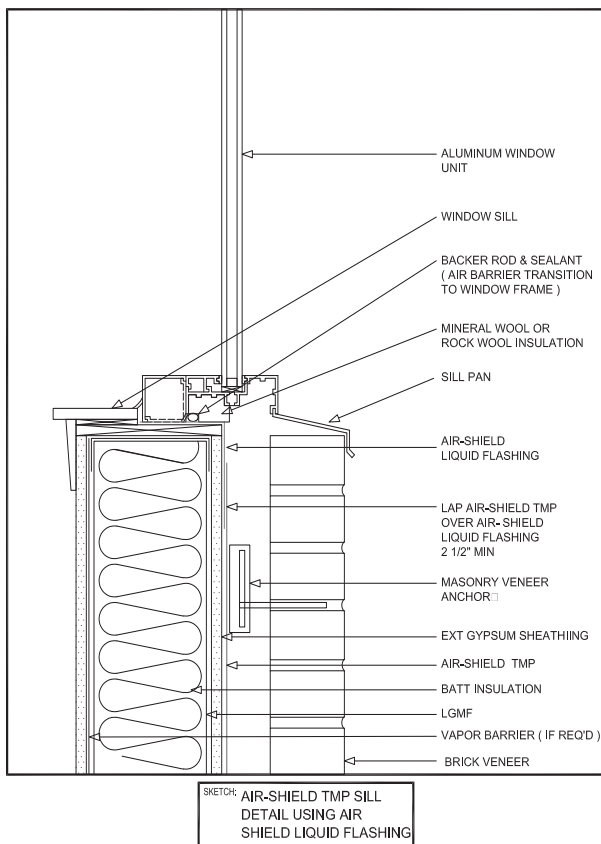


SKETCH: AIR-SHIELD TMP HEAD  
DETAIL USING AIR  
SHIELD LIQUID FLASHING

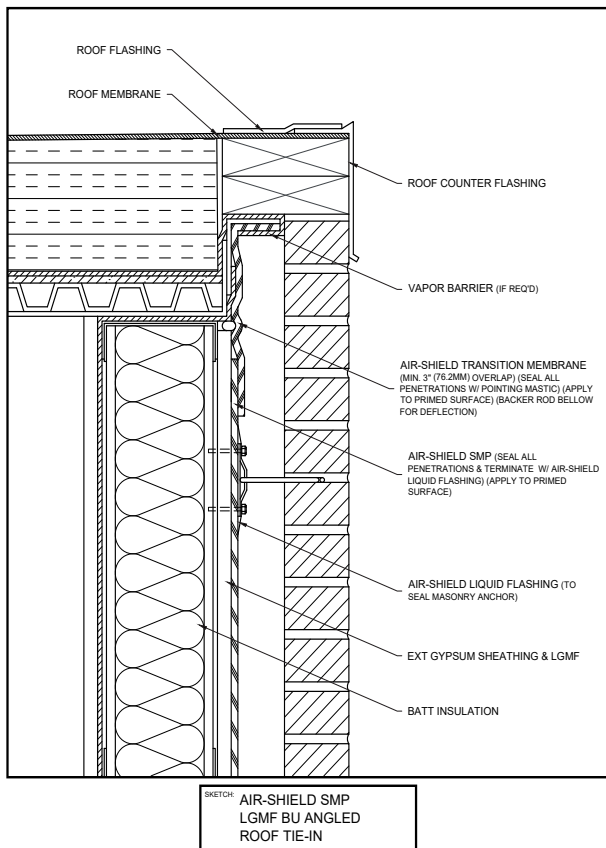


## Air Barriers



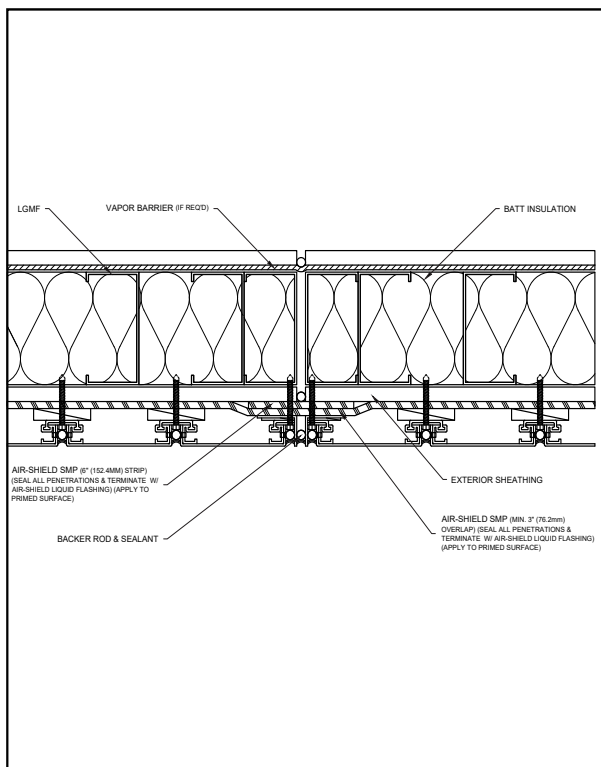


## Air Barriers



# Air Barriers

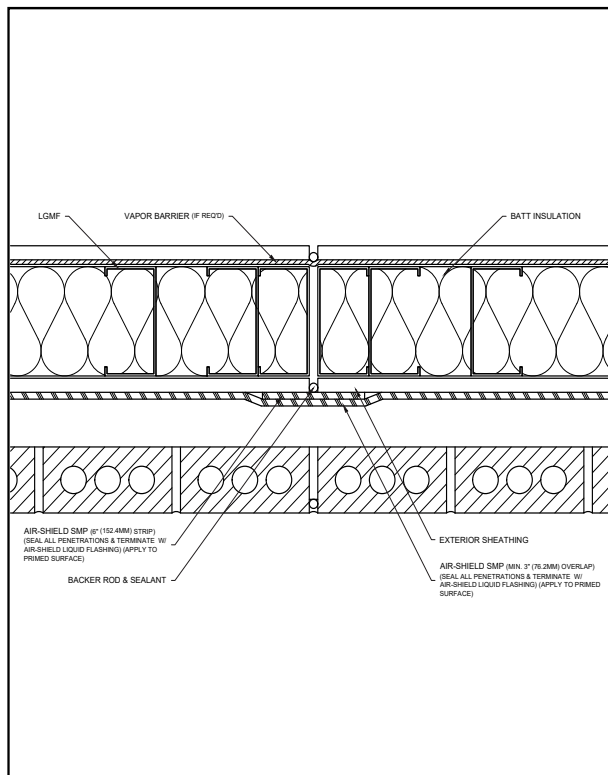




SKETCH: AIR-SHIELD SMP  
LGMF BU CONTROL JOINT  
(METAL CLADDING)  
PLAN VIEW



# Air Barriers

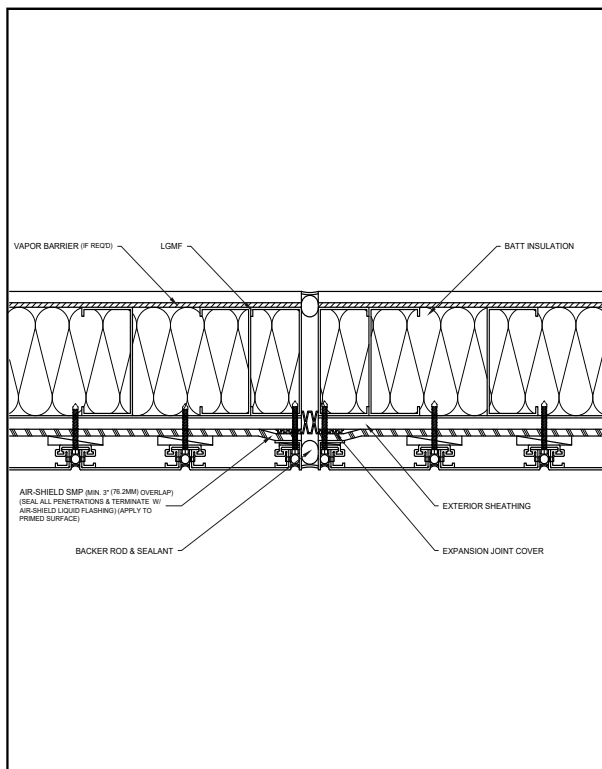


SKETCH: AIR-SHIELD SMP  
 LGMF BU CONTROL JOINT  
 PLAN VIEW

# Air Barriers



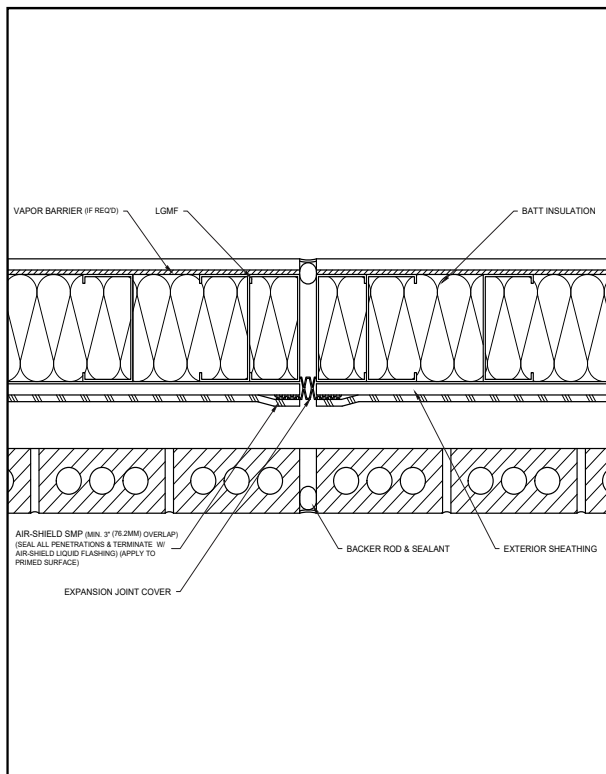




SKETCH: AIR-SHIELD SMP  
LGMF BU EXPANSION  
JOINT (METAL CLADDING)  
PLAN VIEW



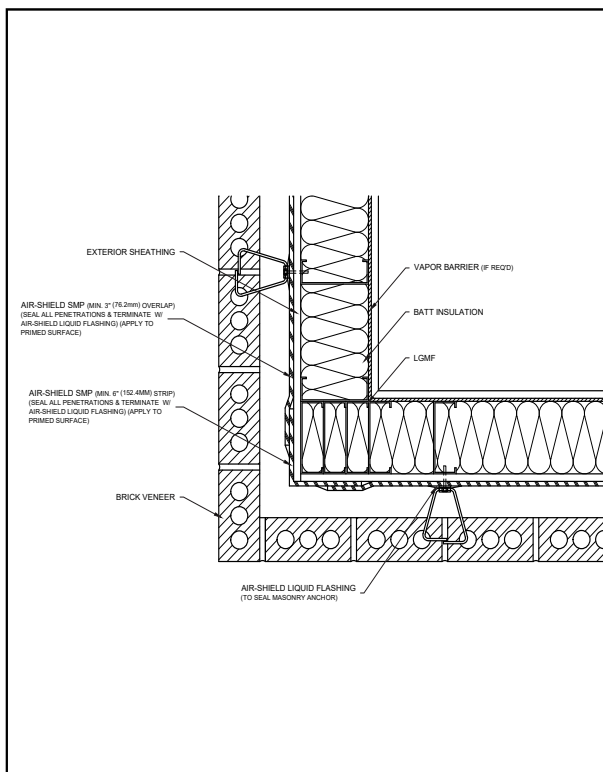
# Air Barriers



SKETCH: AIR-SHIELD SMP  
LGMF BU EXPANSION  
JOINT PLAN VIEW

# Air Barriers

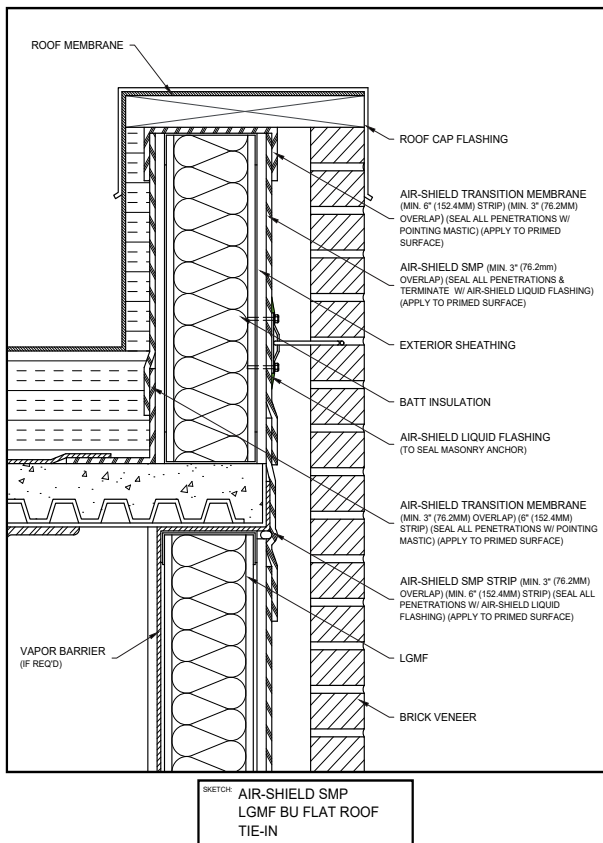




SKETCH: AIR-SHIELD SMP  
LGMF BU EXPANSION  
CORNER PLAN VIEW

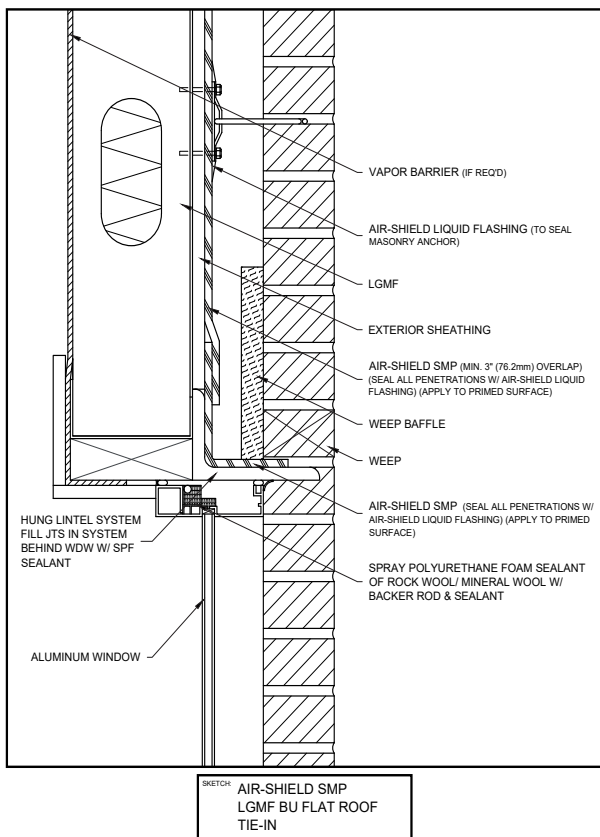


## Air Barriers

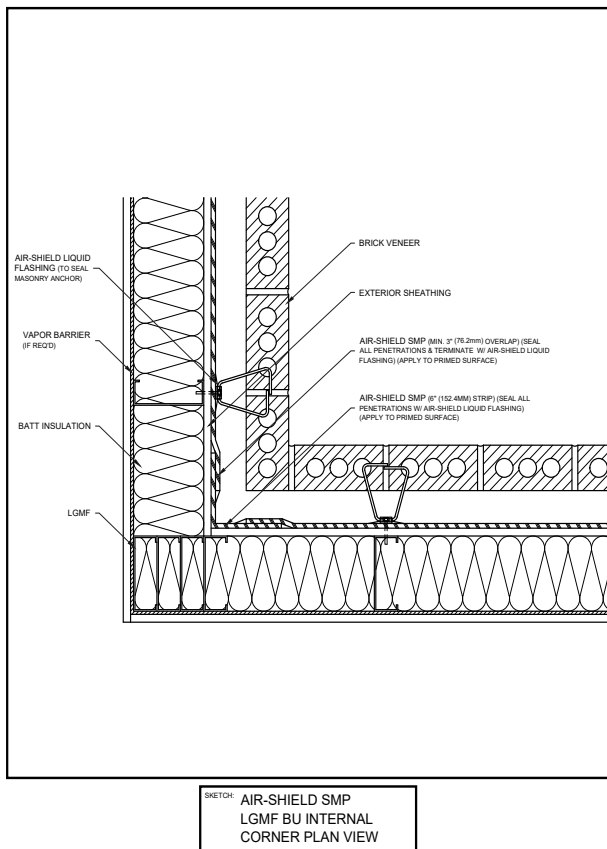


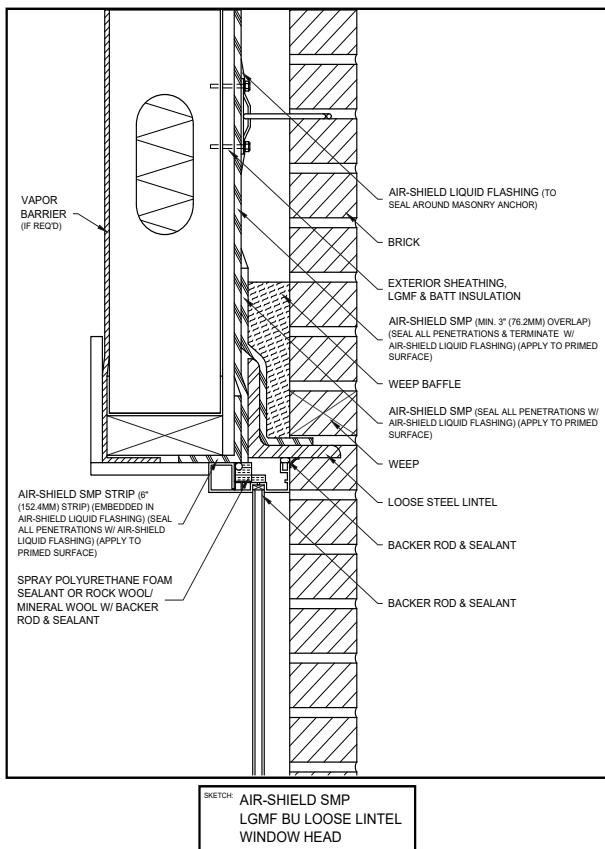
# Air Barriers



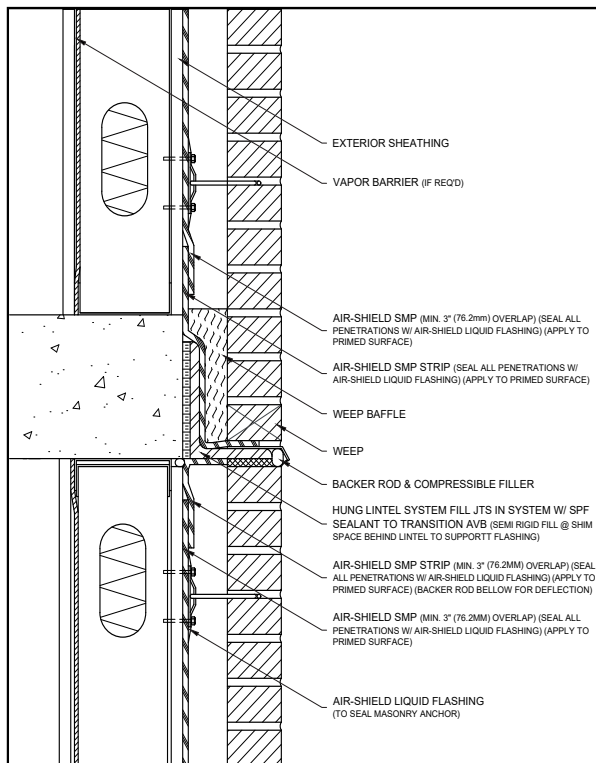


# Air Barriers





# Air Barriers

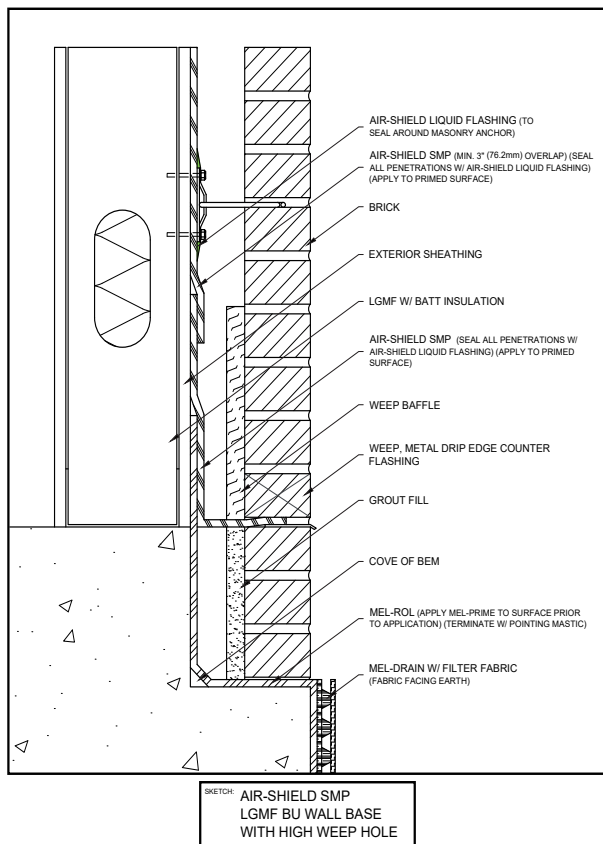


SKETCH: AIR-SHIELD SMP  
LGMF BU RELIEVING  
ANGLE

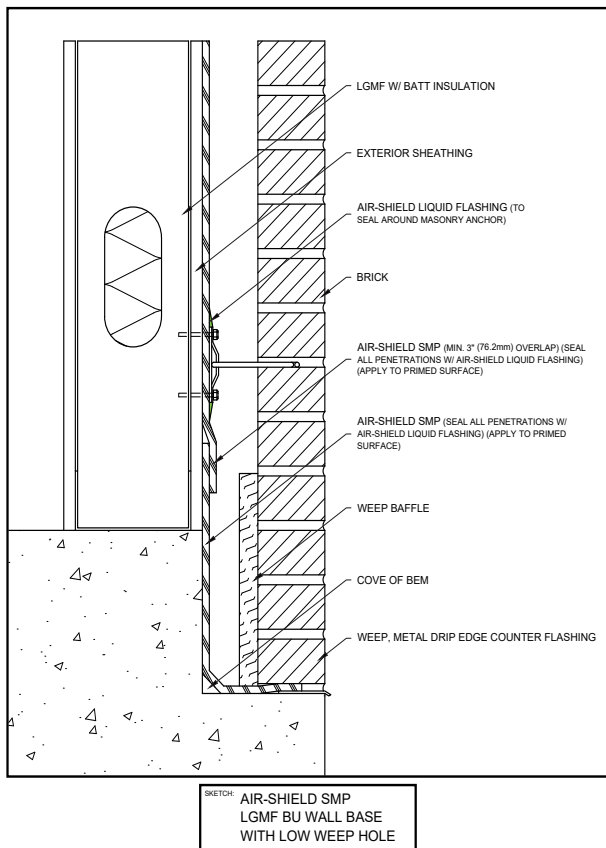
# Air Barriers





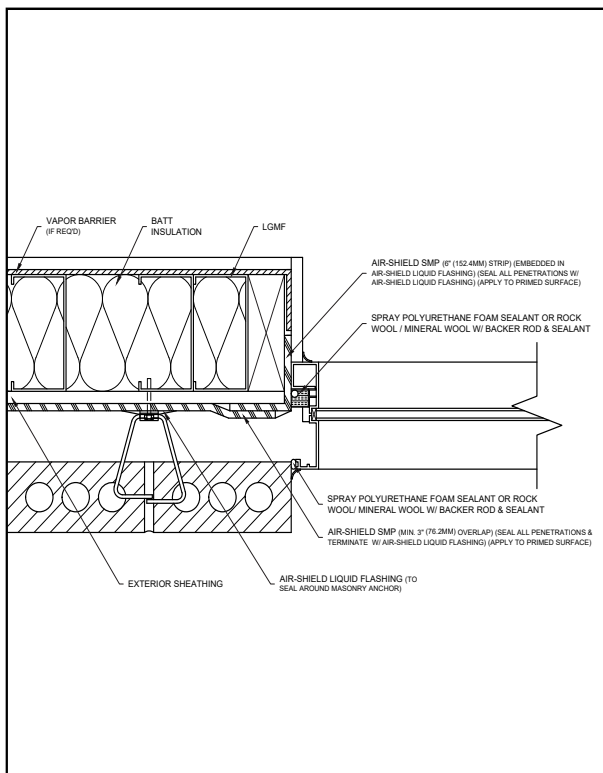


## Air Barriers



# Air Barriers

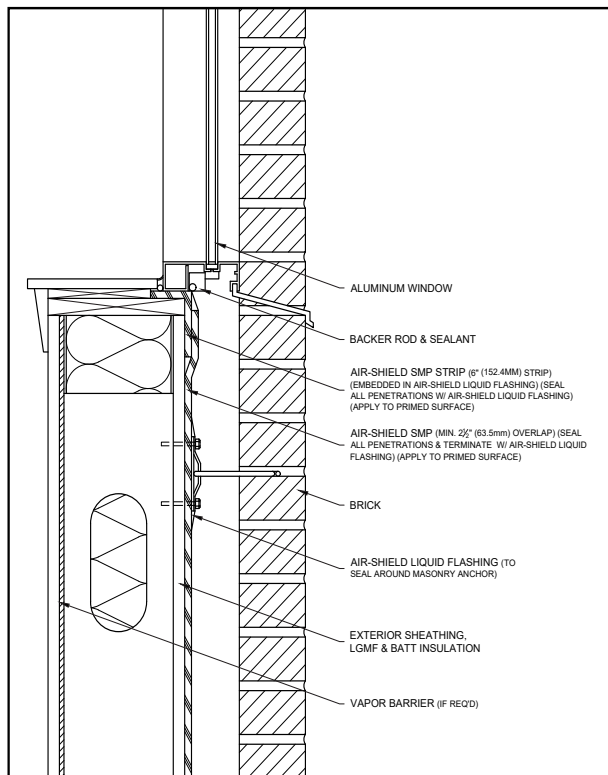




SKETCH: AIR-SHIELD SMP  
LGMF BU WINDOW JAMB



## Air Barriers



SKETCH: AIR-SHIELD SMP  
LGMF BU WINDOW SILL

# Air Barriers



## NOTES

[illegible]

## Air Barriers

## NOTES

[illegible]

## Air Barriers

## NOTES

[illegible]

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