



EPDM x-23 Low-VOC Bonding Adhesive

Product Description

EPDM x-23 Low-VOC Bonding Adhesive was developed to advance low-VOC adhesives already in the market place with improved performance including faster flash-off time, longer open time and eliminates constant stirring, solvent blisters and poor bond strength found in other low-VOC bonding adhesives.

Packaging

EPDM x-23 Low-VOC Bonding Adhesive is packaged in gray five-gallon pails with black lids.

VOC Compliance

EPDM x-23 Low-VOC Bonding Adhesive meets the <250 g/L VOC content requirements for the following areas with VOC transportation restrictions:

California*	Georgia	Massachusetts	Pennsylvania	Virginia
Connecticut	Maine	New Jersey	Rhode Island	
Delaware	Maryland	New York	Utah	

*Low-VOC 1168 Bonding Adhesive must be used in the following California counties:

Alameda, Contra Costa, El Dorado, Los Angeles, Marin, Napa, Orange, Riverside, Sacramento, San Bernardino, San Diego, San Francisco, San Mateo, Santa Clara, Solano, Sonoma and Tehama

Application

EPDM x-23 Low-VOC Bonding Adhesive bonds EPDM membranes to various substrates. It is a contact adhesive applied to both the back of the EPDM membrane and the substrate. The adhesive is allowed to dry until tacky on both surfaces, then mated together to create a strong bond between the membrane and the substrate.

EPDM x-23 Low-VOC Bonding Adhesive is applied at a maximum rate of 60 square feet per gallon, installed (includes gluing both sides). A five-gallon pail should cover no more than 300 installed square feet. Coverage rates are an average and may vary due to conditions on the job site. Porous wall substrates such as masonry block or plywood may require a primer coat of x-23 adhesive on the substrate. In these cases, apply the first primer coat of adhesive to the substrate and allow it to completely flash off. Once the primer coat has flashed off, apply a coat of adhesive at the required coverage rate of 60 square feet per gallon at the same time the membrane is glued.

Approved Substrates / Surfaces

EPDM x-23 Low-VOC Bonding Adhesive can be used to adhere EPDM membranes to the following substrates:

- Polyisocyanurate insulation
- HD polyisocyanurate insulation
- DensDeck® Prime Roof Board
- USG Securock® Brand Gypsum-Fiber Roof Board
- OSB
- Non-Fire-Treated Plywood
- Various Metal Finishes
- Structural Concrete
- Lightweight Insulating Concrete
- Masonry



Why **Distributors value Mule-Hide EPDM X-23 LOW-VOC BONDING ADHESIVE**

- Provides another Mule-Hide low-VOC adhesive solution for low-VOC restricted areas
- Improved performance over the other low-VOC adhesives currently in the market

Why **Contractors value Mule-Hide EPDM X-23 LOW-VOC BONDING ADHESIVE**

- Provides a low-VOC adhesive solution that provides longer open times
- Helps reduce solvent blistering
- Provides a stronger bond than other low-VOC adhesives on the market
- Eliminates the need for regular stirring during use
- More user friendly than previous low-VOC adhesives

Why **Architects value Mule-Hide EPDM X-23 LOW-VOC BONDING ADHESIVE**

- Provides another Mule-Hide low-VOC adhesive solution for low-VOC restricted areas
- Improved performance over the other low-VOC adhesives currently in the market
- Provides a stronger bond than other low-VOC adhesives on the market

Why **Building Owners value Mule-Hide EPDM X-23 LOW-VOC BONDING ADHESIVE**

- Provides another Mule-Hide low-VOC adhesive solution for low-VOC restricted areas
- Improved performance over the other low-VOC adhesives currently in the market
- Provides a stronger bond than other low-VOC adhesives on the market

Does this replace the Low-VOC Bonding Adhesive?

No. EPDM x-23 Low-VOC Bonding Adhesive is offered in addition to the existing Low-VOC Bonding Adhesive. It is recommended that x-23 Low-VOC Bonding Adhesive be used whenever a low-VOC adhesive is required on EPDM projects.

Can the x-23 be used on TPO like Mule-Hide Low-VOC Bonding Adhesive?

No, absolutely not. The x-23 Low-VOC Bonding Adhesive is to be used with EPDM membranes only. Do not use the x-23 Low-VOC Bonding Adhesive with TPO or PVC membranes.

Why select x-23 instead of the other low-VOC bonding adhesives?

The x-23 Low-VOC Bonding Adhesive was developed to advance low-VOC adhesives already in the market with improved flash-off, longer open time and eliminate the constant stirring, solvent blisters and poor bond strength found in other low-VOC bonding adhesives. When low-VOC adhesives are required on an EPDM project, EPDM x-23 Low-VOC Bonding Adhesive is the best adhesive to use.

Is it expensive?

The EPDM x-23 Low-VOC Bonding Adhesive is just slightly more expensive than the Low-VOC Bonding Adhesive it is designed to replace. Adhesive costs are anticipated to be between 2 and 4 percent higher with x-23 Low-VOC Bonding Adhesive. Labor costs should remain the same or slightly lower based on the faster flash-off times.

Can it be used when the temperature is below freezing?

Yes, it can be used when ambient temperatures are near freezing or below. However, the adhesive must be stored in temperatures between 60°F and 80°F for a minimum of 24 hours before use. When temperatures are anticipated to be below 40°F for extended periods of time, use a heated enclosure or a roof top “hot box” to keep the adhesive at room temperature until use. Please remember EPDM x-23 Low-VOC Bonding Adhesive is extremely flammable, so exercise caution when attempting to keep the adhesive warm.

Conversely, jobsite storage in temperatures at or above 90°F may affect shelf life - to prevent high temperature exposure during the summer, store pails of x-23 in shaded areas.

How long can a pail be used when opened?

x-23 Low-VOC Bonding Adhesive is sensitive to moisture in the air and heat will accelerate the effect of moisture. Opened containers of bonding adhesive should be used within 48 hours. After 48 hours, the adhesive will begin to thicken, making it difficult and eventually impossible, to control its thickness. Bonding adhesive that has excessive jelling or thickening must be discarded.

Does the product need continuous stirring while in use like the other low-VOC bonding adhesives?

No. The x-23 Low-VOC Bonding Adhesive only needs to be stirred thoroughly once a day. Stir the adhesive until all settled polymers are dispersed, and the adhesive is a uniform yellow color. During mixing, scrape the sides and bottom of the pail until the adhesive is a uniform yellow color with no dark streaks. To aid the mixing process, keep the adhesive warm and use a mixing paddle.

Can be used on vertical wall or parapet wall details?

Yes. Porous wall substrates such as masonry block or plywood may require a primer coat of x-23 adhesive on the substrate. In these cases, apply the first primer coat of adhesive to the substrate and allow it to completely flash off. Once the primer coat has flashed off, apply a coat of adhesive at the required coverage rate of 60 square feet per gallon at the same time the membrane is glued.