



Decal Application Instructions

To ensure that decals adhere properly to the application surface, follow the instructions below.

C L E A N

Most surfaces are best prepared by cleaning with a 50:50 mixture of *isopropyl alcohol (rubbing alcohol) and water prior to applying a decal. (*Most rubbing alcohol carried in drug stores is a 50:50 mixture.)

Listed below are some exceptions that may require additional surface preparation.

- Heavy Oils: A degreaser or solvent-based cleaner may be required to remove heavy oil or grease from a surface and should be followed by cleaning with the alcohol/water mixture.
- Abrasion: Abrading a surface, followed by cleaning with the alcohol/water mixture, can remove heavy dirt or oxidation and can increase surface area to improve adhesion.
- Adhesion Promoters: Priming a surface can significantly improve initial and ultimate adhesion to many materials such as plastics and paints.
- Porous Surfaces: Materials such as wood, particleboard, concrete, etc. need to be sealed before application to provide a unified surface.
- Unique Materials: Special surface preparation may be needed for glass and glass-like materials, copper and copper containing metals, and plastics or rubber that contain components that migrate.

*Note: These cleaner solutions contain greater than 250 g/l of volatile organic compounds (VOC). Please consult your local Air Quality Regulations to be sure the cleaner is compliant. When using solvents, be sure to follow the manufacture's precautions and directions for use when handling such materials.

P R E S S U R E

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure develops better adhesive contact and helps improve bond strength.

T E M P E R A T U R E

Application temperature of the surface needs to be at least 50° F for bonding to occur. Note that surface temperature and air temperature may differ depending on the location of the product in reference to sun and shade.

M O I S T U R E

It is pertinent that the surface is dry and free of condensed moisture before application.

T I M E

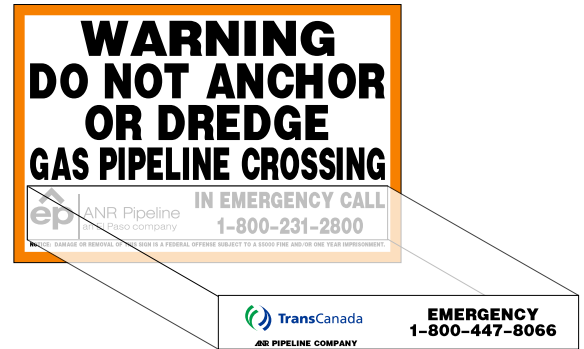
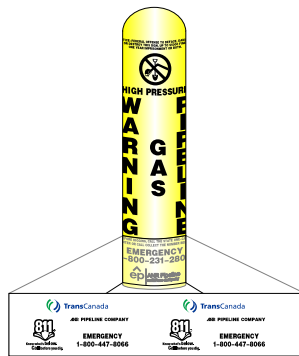
After application, the bond strength will increase as the adhesive flows onto the surface. Allow ample time for adhesion to occur. At room temperature approximately 50% of ultimate bond strength will be achieved after 20 minutes, 90% after 24 hours and 100% after 72 hours. This flow is faster at higher temperatures and slower at lower temperatures. Ultimate bond strength can be achieved more quickly (and in some cases bond strength can be increased) by exposure of the bond to elevated temperatures (e.g. 150° for 1 hour).

Overlay Decal vs New Line Marker

Whether re-branding, implementing the 811 logo or simply changing a phone number, there are many factors to consider when a change needs to be made to a existing line marking system.

- 1) Use an Overlay Decal to cover obsolete information or add new information.
- 2) Replace the existing line marker with a new one.

First consider the appearance of the line marker. If it has a positive appearance and is clearly legible, consider installing an Overlay Decal with the necessary information (photo at right). For larger signs, a thin-gauge aluminum overlay can be used. This type overlay is much easier to install in the field than a large decal.



If the line marker has a negative appearance, such as a damaged structure or illegible message, it should be replaced. See example at left. The sign on the left should have been replaced instead of using an Overlay Decal as a quick fix.

Cost is also a factor. While using an Overlay Decal may be less expensive in the short run, if the line marker is in poor condition it will eventually have to be replaced or face fines from auditors. In this case, it is generally worth the investment to replace the line marker.

Call your Vulcan Customer Service Representative to help you decide which application is best for you.