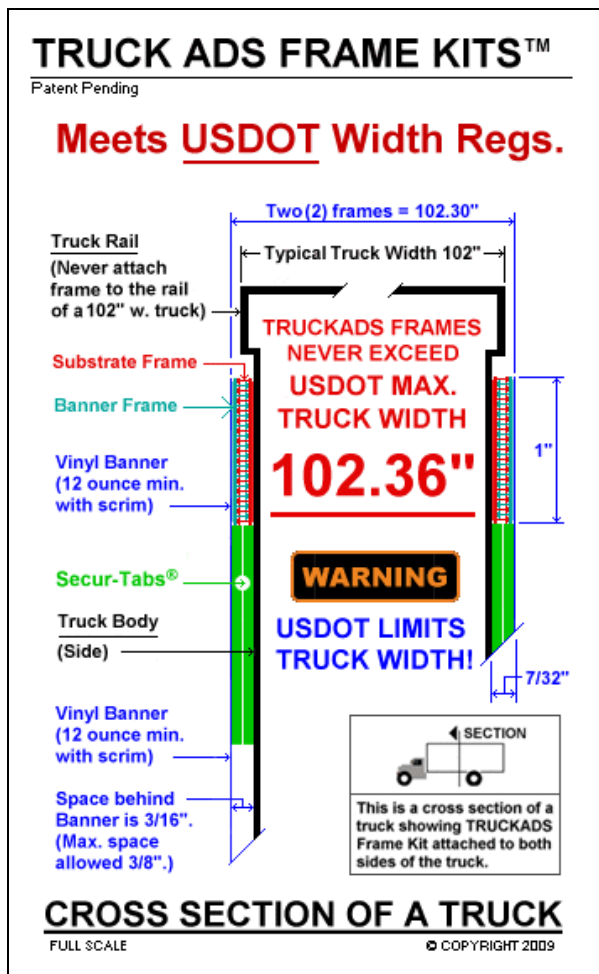


TRUCK ADS Frame Kits™

Installation Manual



Patent Pending

Install properly and TRUCK ADS Frame Kits™ will last a lifetime. Guaranteed!

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United States of America
(703) 538-6711

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TRUCK ADS® Frame Kit Installation Manual #03212010

TRUCK ADS FRAME KITS™
Safe and Secure Banner Frame System
Lifetime Warranty

STEP 1 - Page 2 thru 5

Attach TRUCK ADS® Clear Frame to a Wall, Billboard or Vehicle

STEP 2 - Page 6 thru 8

Attach TRUCK ADS® Black Frame to a Vinyl Banner

STEP 3 - Page 9 and 10

Attach the Vinyl Banner to a Wall, Billboard or Vehicle

SURFACE PREPARATION - Page 11

Suggestions and Application Procedures

Lifetime Limited Warranty

http://www.truckads.com/pdf-bin/Frame_Warranty.pdf

All warranties and product claims are null and void if instructions are not followed or TRUCK ADS® Frame System has been modified by any non TRUCK ADS® Frame component.

TRUCK ADS Frame Kits™ Installation Manual

STEP 1 - Attach TRUCK ADS® Clear Frame to a Wall, Billboard or Vehicle

Before You Start

Read all instructions. TRUCK ADS® Frame System securely adheres to raw metal, metal with baked on factory finish, fiberglass, glass and ceramic. Frame will remain in place until you decide to remove it. Surface where frame is to be attached must be a non-porous, smooth flat surface. Surface must be clean, dry and free of oil. (See page 11 for more surface preparation suggestions and application procedures.) Store Frame Kits in a humidity and temperature controlled environment of 40-60% RH and 16C/60F to 27C/80F, until ready to install. Only install frames at temperatures above 20°C (68°F). Measure the banner size before applying the frame to the banner to make sure the banner is the correct size. Only use 12 to 23 ounce vinyl banner with scrim. **Never install TRUCK ADS® Frame directly to wood, brick, concrete or non-baked on painted surfaces. Do not install directly onto existing vinyl decals. Do not install on vehicle, unless there is a solid closed structural backing directly behind banner that is a maximum 3/8" from the back of the banner. See page 11 for other limitations.**

Getting Started

It does not matter if you install TRUCK ADS® Black Frame to the vinyl banner first or the TRUCK ADS® Clear Frame to a wall, billboard or vehicle first. It is necessary to measure the wall, billboard or vehicle to determine the exact size you want the vinyl banner to be, once installed. It is important to install TRUCK ADS® Frames to a high degree of accuracy. If in doubt, consult with a TRUCK ADS® Frame installer. Also, see warranty: http://www.truckads.com/pdf-bin/Frame_Warranty.pdf

Read instructions carefully before you start. Read the TRUCK ADS® Material Safety and Data Sheets (MSDS) before using TRUCK ADS® Activator™.

Upon taking delivery of a TRUCK ADS Frame Kit™ the customer must:

- Check quantities of TRUCK ADS® Frames
- Check quantities of TRUCK ADS® Secur-Tabs®
- Check quantities of TRUCK ADS® Activator™

You will need the following items not supplied:

- Utility knife or scissors
- Rubber headed hand roller
- Isopropyl alcohol (dilute with 50% water)
- 3M Scotch Brite™ pads
- Vinyl banner with scrim (12 ounce minimum up to 23 ounce maximum)
- Ladder or scaffolding as required by the installation requirements

TRUCK ADS® recommends a minimum of two persons to install banners 7 feet x 7 feet or larger.

Attach TRUCK ADS® Clear Frame to a Wall, Billboard or Vehicle

These 3 steps are described in detail on pages 3 thru 5.

1. **Positioning the Frame** – Mark frame location on the mounting surface
2. **Cleaning and Activator™** – Clean and apply TRUCK ADS® Activator™ to Substrate
3. **Attaching the Frame** – Install TRUCK ADS® Clear Frame and Secur-Tabs® to Substrate

TRUCK ADS Frame Kits™ Installation Manual

STEP 1 - Attach TRUCK ADS® Clear Frame to a Wall, Billboard or Vehicle

1. Positioning the Frame – Mark Frame Location on the Mounting Surface

Decide where the TRUCK ADS® Clear Frame will be placed on the wall, billboard or vehicle surface.

- Set out the position of the front edge of the TRUCK ADS® Frame.
- Mark the top and bottom points of the TRUCK ADS® Frame.
- Mark lines at right angles to the first line for the top and bottom edges of the TRUCK ADS® Frame.
- Mark the rear edge for the TRUCK ADS® Frame.
- To help insure the corners of the TRUCK ADS® Frame are at 90° to one another, measure the two diagonal dimensions from corner to corner. If both are equal, the corners are at 90°. (See Illustration 8, page 5)
- Make any adjustments necessary to achieve an accurate fit.
- Based on the size of the banner, mark the areas where the Secur-Tabs® will be placed and the quantity required. (See Illustration 1 and 2, this page).



NOTE: Butt Secur-Tabs® next to TruckAds Frames™ as shown. For front and rear banner applications, double strips are positioned at top and exhaust vents are at the bottom. See Below.

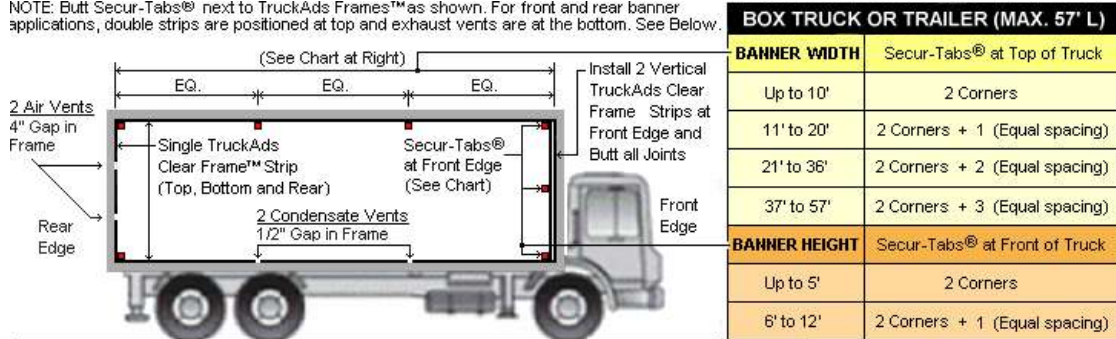


Illustration 1 – Positioning TRUCK ADS® Clear Frame and Secur-Tabs® on a Vehicle

TruckAds® Frames can be reconfigured to any size with respect to the available framing material in a kit. Equally space all Secur-Tabs® supplied and butt next to TruckAds Frame™ as shown.

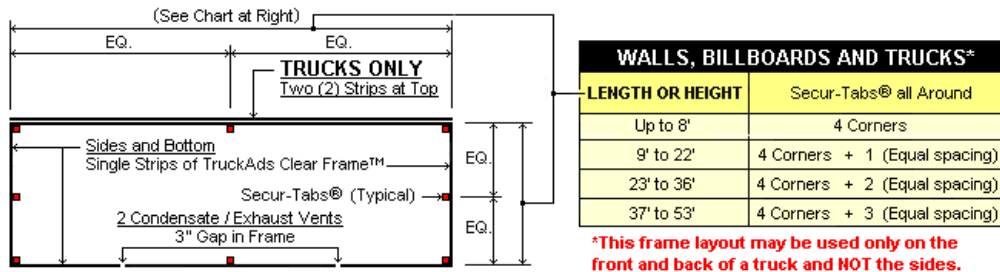


Illustration 2 – Positioning Clear Frame and Secur-Tabs® on a Wall, Billboard and Back or Front of a Cargo Van or Semi-Trailer

TRUCK ADS Frame Kits™ Installation Manual

STEP 1 - Attach TRUCK ADS® Clear Frame to a Wall, Billboard or Vehicle

2. Cleaning and Activator™ – Clean and Apply Activator™ to Substrate

- Clean the mounting surface using Isopropyl alcohol mixed with 50% water. Make sure no dirt, oil or other residue remains. (See Illustration 3, this page and page 11 for more surface preparation suggestions and application procedures.)
- Lightly abrade the surface using 3M Scotch Brite™ pads or similar.
- Apply a thin coat of TRUCK ADS® Activator™ to the areas which will receive the TRUCK ADS® Clear Frame and the TRUCK ADS® Secur-Tabs®. Allow it to dry for 10 minutes or until the coated surfaces are not glossy, before applying TRUCK ADS® Clear Frame and Secur-Tabs®. (Note: Each kit comes with more than enough Activator™ to do the job. Each Activator™ wipe is good for approximately 45 linear feet. Use only enough to cover the surface and then move on. Once Activator™ packets are opened, the wipes must be used immediately or they will dry out.)



Illustration 3 – Preparing the Surface prior to Installing TRUCK ADS® Clear Frame and Secur-Tabs®

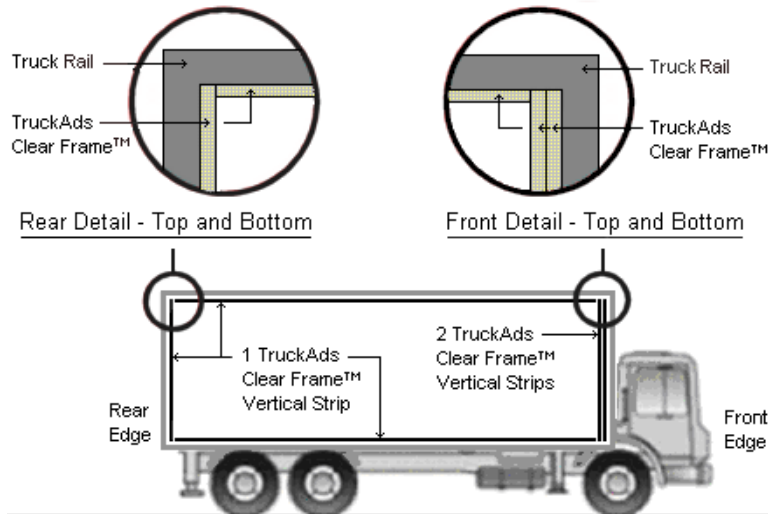


Illustration 4 – Detail Showing TRUCK ADS® Clear Frame on Vehicles*

*When installing TRUCK ADS® Clear Frame on stationary billboards or walls, see Illustration 2, page 3.

TRUCK ADS Frame Kits™ Installation Manual

STEP 1 - Attach TRUCK ADS® Clear Frame to a Wall, Billboard or Vehicle

3. Attaching the Frame – Install (clear) Frame and Secur-Tabs® to Substrate

- Carefully remove the protective backing from a 1' length of the TRUCK ADS® Clear Frame.
- Align the TRUCK ADS® Clear Frame with the front edge markings and press lightly in place.
- Continue setting the TRUCK ADS® Clear Frame in place, 1' at a time, to the full length or height of the predetermined frame size.
- Apply firm pressure to the TRUCK ADS® Clear Frame using a rubber headed hand roller.
- Continue applying the TRUCK ADS® Clear Frame until the entire TRUCK ADS® Clear Frame is in place. (See page 11 for more surface preparation suggestions and application procedures.)
- Leave two ½" long gaps in the bottom edge of the TRUCK ADS® Clear Frame at 1/3rd and 2/3rd points to allow condensation to drain from behind the vinyl banner. (See Illustration 1, page 3)
- Peel off one side of the red protective backing from the TRUCK ADS® Secur-Tabs® and position it next to the TRUCK ADS® Clear Frame. Press firmly. Evenly space, until all TRUCK ADS® Secur-Tabs® have been attached. Leave the remaining red thin protective film on the face of the Secur-Tabs®, until you are ready to install the banner. (See Illustration 1, 2 and 7) When replacing a banner, install replacement secur-tabs prior to installing replacement banner.

Mounting Direction of Secur-Tabs®

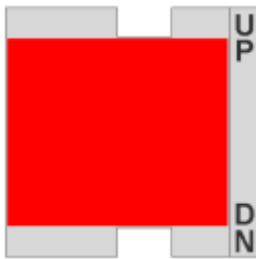


Illustration 5

Starter Frame Kits:

Secur-Tabs® in Starter Kits come preassembled and ready to install.

Replacement Frame Kits:

Secur-Tabs® in Replacement Kits come unassembled. Connect Tabs to existing Secur-Tabs located on the truck or other substrate, prior to installing banner.

Slide all Tabs together until you hear a "snap lock". Then install the banner.

Disengaging Secur-Tabs® from each Other



Illustration 6

Removing Banners and Tabs:

1. Carefully, peel back the frame (1 foot or more) around all areas that butt each Secur-Tab®.
2. Position tip of screw driver in the "bottom or top slot" of the Tab attached to the banner and push until it slides and disengages from the Tab attached to the truck or other substrate.
3. Continue until all Secur-Tabs® are disengaged, then continue separating the frame until the banner can be removed.

Important Notes for Vehicle Applications Only

Set out a second vertical strip of the TRUCK ADS® Clear Frame behind the front edge strip to create 2 vertical strips at the front edge of the frame. (See Illustration 1, page 3; Ill. 4, page 4 & 7 below)

Leave two gaps, 4 inches in length in the rear edge of the TRUCK ADS® Clear Frame at 1/3rd and 2/3rd heights. (See Illustration 1, page 3)

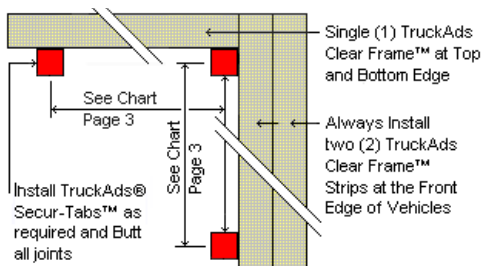


Illustration 7 – Front Corner Detail of TRUCK ADS® Clear Frame and Secur-Tabs® on a Vehicle

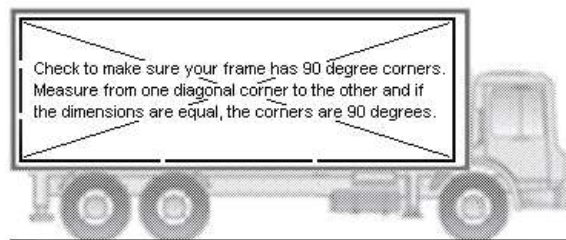


Illustration 8 – Check the Frame Layout before Applying the Frame Kit

TRUCK ADS Frame Kits™ Installation Manual

STEP 2 - Attach the TRUCK ADS® Black Frame to a Vinyl Banner

Preparing the TRUCK ADS® Black Frame for attachment to the Vinyl Banner

The **printed vinyl banner for moving vehicle applications** shall be 12-23 ounce vinyl with scrim and is described as having a front edge, rear edge, top edge and bottom edge. Vehicles also have a right side and a left side. To facilitate installation instructions we use these descriptions. (See Illustration 9, this page)

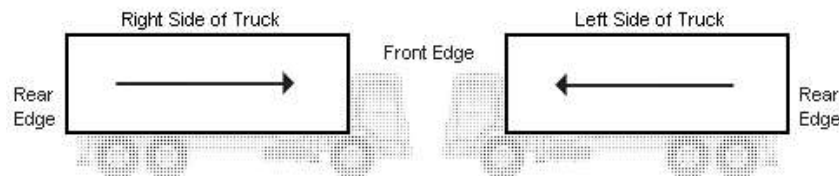


Illustration 9 – Printed Vinyl Banner Descriptions for Vehicle Applications

For moving vehicle applications, the front edge of the printed vinyl banner has 2 vertical strips of TRUCK ADS® Black Frame and the three remaining edges have single strips of TRUCK ADS® Black Frame. (See Illustration 10 this page; Illustration 11 and 12, page 7)

For stationary walls and billboards, a single TRUCK ADS® Black Frame strip is fitted to each edge. (See Illustration 11, page 7)

The TRUCK ADS® Black Frame on the top and bottom edges of the printed vinyl banner shall be installed the full length of the banner.

The vertical TRUCK ADS® Black Frame on the front and rear edges butt against the top and bottom frame strips. (See Illustration 10 this page; Illustration 11 and 12, page 7)

For walls and billboards, the descriptions illustrated above are generally not useful unless there is a specific orientation for the graphic to be printed. If this is the case, it is important to mark left and right on the reverse of each banner.

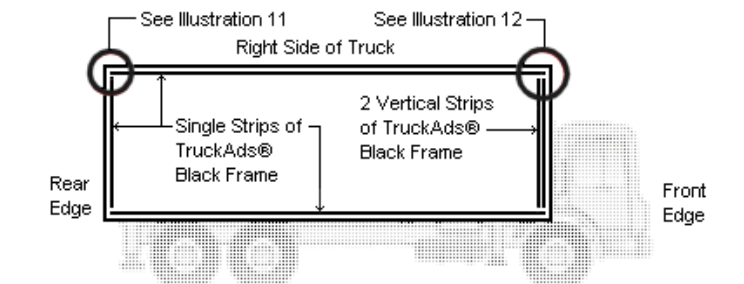


Illustration 10 – Vehicle Application Showing TRUCK ADS® Black Frame on the Vinyl Banner*

*When installing TRUCK ADS® Frames for walls and billboards, only one strip is installed around the perimeter. See Illustration 2, page 3.

TRUCK ADS Frame Kits™ Installation Manual

STEP 2 - Attach the TRUCK ADS® Black Frame to a Vinyl Banner

Trim the Printed Vinyl Banner (with scrim) to Exact Dimensions

The printed vinyl banner must be produced to a high degree (+/- 1/8", 3mm) of accuracy. To make sure the printed vinyl banner is square prior to trimming, you can double check your work by measuring the diagonal dimension to see if they are of equal dimension. (See Illustration 8, page 5)

Once you are satisfied with your measurements, trim the vinyl banner (with scrim), as required.

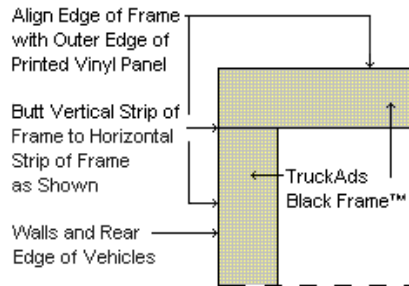
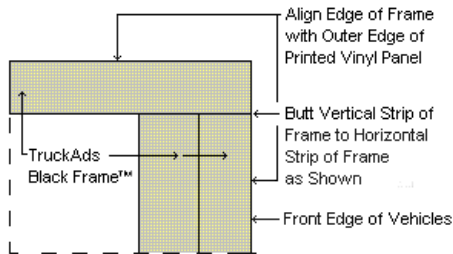


Illustration 11 – Corners of TRUCK ADS® Black Frame on Banner for Wall, Billboard and Rear of Vehicle



Note: For front and back installations on trucks see illustration 2, page 3.

Illustration 12 – Front corner assembly of TRUCK ADS® Black Frame on Banner for Vehicle

The vinyl banner frame must be slightly smaller than the wall or vehicle frame for which it is intended.

Wall and Vehicle Frame Height:	1' - 4'6" (305 - 1372mm)	4'7" - 16' (1373 - 4877mm)	16'1" - 32' (4878 - 9754mm)
Trim Printed Vinyl Panel Height:	0" (0mm)	- 1/8" (3mm)	- 1/4" (6mm)
Wall and Vehicle Frame Length:	1' - 16' (305 - 4877mm)	16'1" - 32' (4878 - 9754mm)	32'1" - 53' (9755 - 16155mm)
Trim Printed Vinyl Panel Length:	- 1/8" (3mm)	- 1/4" (6mm)	- 1/2" (12mm)

Example: Wall or Vehicle Frame Height: 8' (2438mm) = Undersize Vinyl Banner Height to: 7' 117/8" (2435mm)

Table 1 - Refer to this Table and Example for Proper Sizing of Vinyl Banner and Frame

TRUCK ADS Frame Kits™ Installation Manual

STEP 2 - Attach the TRUCK ADS® Black Frame to a Vinyl Banner

Apply the TRUCK ADS® Black Frame to the Printed Vinyl Banner

After trimming the vinyl banner (with scrim), apply the TRUCK ADS® Black Frame straight and 'kink-free' to the vinyl banner.

- Make sure the printed vinyl banner is clean. Wipe on Isopropyl alcohol mixed with 50% water and then wipe off with clean lint-free cloth or paper. (See Illustration 13, this page and page 11 for more surface preparation suggestions and application procedures.)
- Apply a thin coat of TRUCK ADS® Activator™ to the printed vinyl banner. Width of Activator™ applied shall be the same width as the TRUCK ADS® Black Frame to be attached. Allow it to dry for 10 minutes or until the coated surfaces are not glossy and then apply the frame. (Note: Each kit comes with more than enough Activator™ to do the job. Each Activator™ wipe is good for approximately 45 linear feet. Use only enough to cover the surface and then move on. Once the packet is opened, it must be used. Activator™ will dry out if not used immediately.)
- Accurately line up the TRUCK ADS® Black Frame with the edge of the vinyl banner. Carefully remove the thin film backing and use light pressure to lay the TRUCK ADS® Black Frame against the vinyl banner.
- Using a rubber headed hand roller, apply firm pressure to the whole length of TRUCK ADS® Black Frame and vinyl banner to make sure no air is trapped between the banner and the frame.



Illustration 13 – Preparing the Surface and Installing TRUCK ADS® Black Frame

Prepare Banner for Shipment After Frame Is Installed on Banner (Optional)

To facilitate installation, once the TRUCK ADS® Black Frame is securely attached to the printed vinyl banner, roll the printed vinyl banner (print side toward the inside) around a (2 to 6" diameter) cardboard core or similar tubing.

- The banner rolls up better when rolled with a thin layer of bubble wrap inserted to prevent buckling of the vinyl banner material.
- The banner should be rolled so that the front edge remains to the outside. In other words, when the package is opened for unrolling, the end which is accessible first is the front edge. (See Illustration 9, page 6)
- The outer packaging should be marked appropriately to ensure proper delivery.
- When necessary, a job and vehicle ID number should be clearly marked on the outer packaging.

TRUCK ADS Frame Kits™ Installation Manual

STEP 3 - Attach the Vinyl Banner to a Wall, Billboard or Vehicle

The Final Step – Attaching the Vinyl Banner to a Wall, Billboard or Vehicle

Upon taking delivery of a vinyl banner with a TRUCK ADS® Frame attached, the installer shall verify the following:

- Make sure the printed vinyl banner is correctly sized and the TRUCK ADS® Black Frame is securely attached to the vinyl banner.
- Confirm that the required number of TRUCK ADS® Secur-Tabs®, are included in the shipment.

Installing the TRUCK ADS® Frame with banner can be easily accomplished without specialized equipment, if you follow these easy instructions.

Attach Banner to a Wall, Billboard or Vehicle

1. **Load it up** – Lightly attach banner to top of Frame on substrate.
2. **Line it up** – Check measurements and align banner.
3. **Lock it up** – Tension the banner and lock it to the substrate frame.

These 3 steps are described in detail on page 9 and 10.

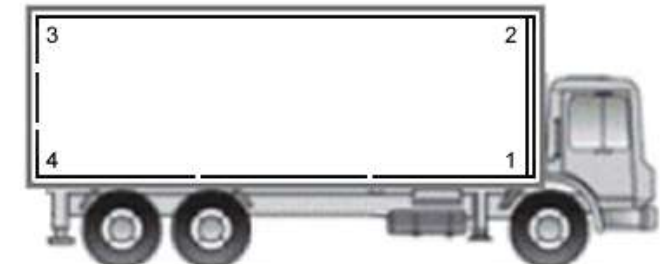


Illustration 14 – Attaching Vinyl Banner (with scrim) to a Wall, Banner or Vehicle

1. Load It Up – Lightly Attach Banner to Top of Frame on Substrate

Gradually unroll the banner, lightly fixing the printed vinyl banner frame along the top edges from point #2 to point #3 to the (already installed) wall, billboard or vehicle frame. (See Illustration 14, this page)

- Make sure the TRUCK ADS® Clear Frame on the wall, billboard or vehicle and the TRUCK ADS® Black Frame on the printed vinyl banner accurately line up with one another as work proceeds. (Note: the corners of the TRUCK ADS® Black Frame on the vinyl banner and the TRUCK ADS® Clear Frame on the wall or vehicle surface are purposely installed in an overlapping, interlocking configuration to enhance system integrity.)
- Check bottom edge alignment is accurate as work proceeds.
- Lightly fix the banner from point #2 to point #1.

TRUCK ADS Frame Kits™ Installation Manual

STEP 3 - Attach the Vinyl Banner to a Wall, Billboard or Vehicle

2. Line it Up – Check Measurements and Align Banner

Check that the TRUCK ADS® Black Frame on the printed vinyl banner is the same size and shape (minus required under sizing – See Table 1, Page 7) as the TRUCK ADS® Clear Frame on the wall, billboard or vehicle.

- Make any adjustments as necessary.
- Insure that the banner frame will align accurately to the substrate frame when finally locked in place.

3. Lock it Up – Tension the Banner and Lock it to the Substrate Frame

If the TRUCK ADS® Secur-Tabs® have not yet been fitted, install them at this stage, following the appropriate instructions on page 2 thru 5. After you install them, remove the thin, red protective film so the adhesive surface is exposed. **DO NOT PRESS THE VINYL AGAINST THE SECUR-TABS® UNTIL YOU HAVE COMPLETED LOCKING THE TRUCK ADS® FRAME TOGETHER.** If you accidentally secure one of the Secur-Tabs® to the vinyl before you are ready, carefully separate it from the vinyl and refit when ready.

- First, work along the top edge from point #2 to point #3. (See Illustration 14, page 9)
- Secure the banner in place working in sections 2' to 3' long, using firm, even pressure with a rubber headed roller.
- Then secure the front edge of the banner from point #2 to point #1. Again, work in sections 2' to 3' long using even, firm pressure on the roller. (See Illustration 14, page 9)
- Then, work along the bottom edge of the banner from point #1 to point #4 and apply sufficient **DOWNWARD TENSION** to the banner to ensure a smooth, wrinkle free fit while locking the TRUCK ADS® Frame in place. (See Illustration 14, page 9)
- Using the same technique, fix the rear edge of the banner from point #3 to point #4. (See Illustration 14, page 9)
- Almost done. It is time to make any minor adjustments to achieve the desired fit by unlocking the TRUCK ADS® Frame with a small blunt instrument and peeling back sufficient length to allow any required adjustment.
- Finally, press firmly with your installation roller where the Secur-Tabs® are located and secure the vinyl to the Secur-Tabs® permanently. Repeat the same to the entire frame.

Always Remember

- Check frame alignment as work proceeds.
- Apply sufficient tension to the banner to ensure a smooth, wrinkle free fit.
- Check that all TRUCK ADS® Frames and Secur-Tabs® have been securely locked and closed.
- All warranties and product claims are null and void if instructions are not followed or TRUCK ADS® Frame System has been modified by any non TRUCK ADS® Frame component.
- Use only vinyl banner 12-23 ounce with scrim.

For Frame and Secur-Tabs® Removal

Visit TRUCK ADS® website and go to http://www.truckads.com/pdf-bin/frame_removal.htm

TRUCK ADS Frame Kits™ Installation Manual

MORE SURFACE PREPARATION - Suggestions and Application Procedures

Cleaning the Banner and Substrate Mounting Surfaces

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 Isopropyl alcohol and water. On surfaces with a light oily film, or other light contamination, the 50-50 IPA/water solution is usually adequate. Where heavy oils or grease are present, a "degreasing" solvent is suggested to cut the oil. This should always be followed with an IPA/water cleaning to ensure that any residue or film is removed.

Abrading the Substrate Mounting Surfaces

Abrading the substrate surface can serve several functions:

- Remove heavy levels of dirt or oxide from metals or paints (e.g. galvanized steel).
- Create additional surface area that can increase adhesion.
- Smooth a surface to obtain more flatness, allowing improved contact area.

Abrasion often helps adhesion to paints and plastics. When abrading, it is important for the TRUCK ADS® Frame to have a finely abraded substrate surface to adhere to. Very small scratches in the substrate, generated with circular motion rather than straight-line motion, are most desirable. A surface with many micro-scratches in it can have up to 40% additional available surface area, translating to higher ultimate strength and greater initial adhesion. Scotch-Brite® Hand Pads are good for achieving the right level of abrasion. Always clean surface with IPA/water solution or additional methods previously described, and be certain that all loose particles are removed prior to bonding the TRUCK ADS® Frame to the substrate.

Application Procedure on Banners, Metal and Fiberglass

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. It is suggested to roll down the TRUCK ADS® Frame at least once in each direction with 5 to 10 pounds of push pressure to insure 100% adhesive contact, especially along the edges of the TRUCK ADS® Frame.

Remove the liner from the TRUCK ADS® Frame adhesive. Without touching the adhesive, align the TRUCK ADS® Frame on the substrate surface. One end of the TRUCK ADS® Frame is pressed down (tabbed) while holding the other end of the strip under light tension. The TRUCK ADS® Frame is then slowly rolled down the entire length of the strip from the tabbed end with a rubber headed hand roller, taking care not to trap air bubbles under the adhesive and not to crush the TRUCK ADS® Frame stems.

It is important to roll down the TRUCK ADS® Frame to insure almost 100% contact, especially along the edges of the TRUCK ADS® Frame. A minimum of 24 hours dwell time is recommended before applying a load or disengaging assembled parts. At room temperature, approximately 50% of the ultimate strength will be achieved after 20 minutes, 90% after 24 hours and 100% after 72 hours. Shelf life is 12 months from date of purchase, so be sure to install frame within 12 months of purchase date.

Application Procedure on Glass and Ceramic Substrates

When bonding to building glass or ceramic tile surfaces, always use TRUCK ADS® Glass Activator™. Always use TRUCK ADS® Standard Activator™ on the banner surface. Both types of Activator™ are supplied in kits designated for glass and/or ceramic installations.

Application Warning

Never attach the TRUCK ADS® Clear Frame to the "exterior" side of glass located on a vehicle that will be driven. Never install TRUCK ADS® Clear Frame on non-factory painted vehicle surfaces that will be driven. Never install the TRUCK ADS® Black Frame to the mounting substrate. Never install the TRUCK ADS® Clear Frame to the banner surface. Only use proper weight vinyl with scrim. Follow all instructions.