Tensioning Instructions
Tensioning System Instructions

Before beginning, thoroughly read all tensioning instructions.

Tools Required:

1. SignComp Tensioning Tool, part #5135 or the #5137 or #5138 for the Wall Mount Tension.
2. Pen or marker.
3. Razor blade or utility knife.
4. Standard slotted screw driver.

NOTE: The SignComp tensioning system is suitable for use in dry, dry and damp or wet locations. Frames greater that 6 feet need to be braced to prevent billowing. Contact a local engineer for placement and quantity. SignComp tensioning system is not acceptable where an electrical enclosure is required.

1 Flexible Sign Fabric Requirements

STRAIGHT TENSION CHANNEL FRAMES

To the outside dimensions of any assembled STRAIGHT TENSION CHANNEL FRAME, add 1-1/2” of flexible fabric to all four sides. (Add a total of 3” of fabric to both the height and width dimensions of the assembled frame.)

NOTE: Measure from the center of the Dual Divider.

VERTICAL TENSION CHANNEL FRAME

To the outside dimensions of the assembled WALL MOUNT TENSION FRAME, add 2-1/4” of flexible fabric to all four sides. (Add a total of 4-1/2” of fabric to both the height and width dimensions of the assembled frame.)

2 Tension Clip Requirements

To determine the approximate number of Tension Clips required, measure the outside dimensions of the assembled sign frame. You will require a minimum of two (2) Tension Clips for every perimeter foot. Use 6” on center for straight tension channel frames and 5” on center for angled and vertical tension channel frames and the Dual Divider.

Outside dimensions = 36’ (perimeter feet) x 12” = 432”. 432” / 6” = 72 Tension Clips for straight tension channel frames. 432” / 5” = 87 Tension Clips for angled tension channel frames.

See page 5, E. Tension Clip Placement for further details.
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3 Basic Instructions

A. Trim the flexible sign fabric to size.
The fabric is to be cut to the appropriate size. See page 1, 1. Flexible Sign Fabric Requirements.

B. Establish the Tension Clip Placement Line.
IMPORTANT - Address the fabric graphic side up.
The clip placement line is to be located on the graphic side of the fabric.

FOR ALL FRAMES:
Draw or drop the clip placement line 1-1/2” in from the edge of the trimmed to size fabric.
NOTE - Wall Mount Tension Frame (WMTF) (Part #2090), come in 2-1/4” from the edge of the trimmed to size fabric.

IMPORTANT - The stretch factor of the flexible fabric varies considerably for each brand. For large applications (10’ x 10’ or larger), it is advised to test the stretch factor before determining the clip placement line. See Page 7, Important Note.

HINT: Straight Tension Channel Frames and WMTF may be placed on the fabric, centered over the graphic (1-1/2” from edges and 2-1/4” for WMTF) and traced along the outside perimeter of the frame to establish the clip placement line. (Illus. 1 & 2).

HINT: Angled Tension Channel Frames may be used as a straight edge to draw the clip placement line and trimmed to size fabric line.

IMPORTANT: Be sure to adjust the position of the angled tension channel frame to accommodate the additional fabric required. See Page 2, 1. Flexible Sign Fabric Requirements.

C. Notch the Corners
Cut away an approximate 2-1/2” square notch from the fabric edge in each of the four corners of the trimmed to size fabric.

IMPORTANT - It can be an advantage NOT to cut away a notch from each corner for the Bleed Frames and the Wall Mount Tension Frame.

HINT:
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D. Tension Clip Attachment

**IMPORTANT** - Tension Clips are attached to the fabric graphic side up.

**NOTE** - The Tension Clip is comprised of two components: The **Tension Clip Body** and the **Tension Clip Mandrel**. (Illus. 3)

1.) Place the mandrel, smooth side up, on the fabric just inside the clip placement line. (Illus. 3)

2.) Fold the fabric over the mandrel. (Illus. 5)

3.) Rotate the fabric and mandrel forward by lifting the edge nearest you to stand the mandrel and fabric up on its edge. (Illus. 6)

4.) With the SignComp logo facing toward you, use thumb pressure to drive one end of the clip body down on to the mandrel and fabric. (Illus. 7 & 8)
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5.) Using palm pressure, drive the remaining end of the clip body down onto the mandrel and fabric. (Illus. 7, 8, & 9.)

**HINT:** Do not try to drive both ends of the clip body down onto the mandrel and fabric at the same time. Snap one end down then the other end.

**E. Tension Clip Placement** (Illus. 10)

The following Frames have a clip placement of approximately 6” on center.

- 1-1/2” Fascia Frame Part #2094
- Dual Frame Part #2065
- 2” Retro Frame Part #2112

**HINT -** Tension Clip Position may be adjusted without removing the Tension Clip from the fabric. Slide the clip mandrel in the direction you wish to move the Tension Clip. Repeat this procedure until position adjustment is achieved.

**HINT -** The Tension Clip may be detached from the fabric by pulling the Tension Clip Body straight off and away from the fabric and Tension Clip Mandrel.
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F. Tensioning

1.) Lay the assembled frame flat with the extruded Tension Channel facing up.

2.) Lay the fabric, with the Tension Clips attached, over the assembled frame graphic side up.

3.) Insert the Tension Clips into the Tension Channel of the assembled frame. Work your way around the frame just starting each clip into the extruded frame as shown. (Illus. 12 & 13.)

**HINT:** When pulling on the fabric do not pull directly on the fabric flap or Tension Clip doing so will cause the Tension Clip to pop off. When pulling on the face grasp the fold and pull the face into place.

4.) Using the Tension Tool, exert a downward force onto each Tension Clip, pressing it into the extruded frame as shown. (Illus. 12 & 13.)

**HINT:** Just start the Tension Clips in one or two clicks, working your way around the frame. Go back around a second time and apply tension by driving the Tension Clips down into the frame. **Do not over tension.** Apply just enough tension to achieve a smooth, flat appearance.

G. Tension Tool Use

Hook the Tension Tool tip under the outside rail of the assembled frame. Slide the Tension Tool along the outside rail. With gentle, consistent pressure, force the Tension Clip into place by pressing the “wings” of the Tension Tool downward onto any portion of the Tension Clip.

By pushing or pulling the Tension Tool handle while the Tension Tool tip is inserted under the outside rail, leverage is gained to exert force down on to the Tension Clip. (Illus 12 & 13.)

**NOTE:** Downward pressure may be applied to either end or the middle of the Tension Clip.
H. Releasing the Tension and Removing the Tension Clip

A standard slotted screwdriver is used to release tension from the installed fabric. Insert the tip of the screwdriver into the recess located at the backside of the Tension Clip. Rotate or tilt the screwdriver to separate the Tension Clip teeth away from the extruded teeth within the frame. This will release the tension or allow the Tension Clip to be removed from the frame by prying or pulling the Tension Clip up & out. (Illus. 14 &15.)

Important Note: It is important to note the stretch factor of the flexible fabric varies considerably for each brand. When tensioning large sign faces (10’ x 10’ or larger) it is advisable to test the stretch factor by using a strip of the same fabric with one tension clip on each end.

I. References

STRAIGHT TENSION CHANNEL FRAMES

- Dual Frame Part #2065

ANGLED TENSION CHANNEL FRAMES

- Tension Frame Part #2085

VERTICAL TENSION CHANNEL FRAME

- Wall Mount Tension Frame Part #2090

Illus. 14

Illus. 15
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