

# **Installation Instructions for Stand Alone FRP Sani-Kennel**

# Introduction

Thank you very much for your investment in Mason kennels. We take great pride in providing our customers with the highest quality animal enclosures combined with an enjoyable ordering experience. The following instructions will assist you with proper assembly, cleaning, and maintenance of your Mason kennels. It is important to follow these guidelines to receive the best results and maximum life from your investment.

#### **Assembly**

The following pages will show you how to assemble your new Mason kennel. Since every order is custom built to your specifications, the instructions are designed to show the various methods used to assemble our kennels and some of the demonstrations may not apply to your order. Be sure to use the enclosed scale drawings at the end of this document of the hardware provided to ensure proper identification and usage.

#### Hardware

Depending on your Kennel project you may have some or all the following hardware:

Part #	Description	Part #	Description
2222	#10-32x 5/8" TEK screw(s)	8081	Triple SS clamp(s) -1" (w/stainless steel gate
2449	Sealant		option)
356	5/16" x 1-1/2" carriage bolt(s)	8082	Double SS clamp(s) -1" (w/stainless steel
357	5/16" x 1-3/4" carriage bolt(s)		gate option)
1771	5/16" x 1-3/4" SS carriage bolt(s)	8083	Single SS clamp(s) -1" (w/stainless steel gate
1955	5/16" x 1-1/2" SS carriage bolt(s)		option)
423	5/16" – 18 nut	330	Panel clamp (w/chain link gate option)
424	5/16" – 18 SS nut	328	Triple clamp (w/chain link gate option)
369	1/4"-20 x 1-1/2" hex head bolt	8404	Large Corner Gusset
	(w/stainless steel gate option)	8405	Small Corner Gusset
421	1/4"-20 nylok nut	8406	Long Panel Horizontal Gusset
422	1/4"-20 hex nut	8416	Long Panel Vertical Gusset
1400	1/4" x 1-1/2" Rawl spike(s)	366	1/4"-20 x 1" hex head bolt
	(anchored systems only)	891	#12 x 1" Hex Head Sheet Metal Screw
933	1/4"-20 x 1/2" round head screw	8399	71.875" Panel Connection H
2438	1/4"-20 x 1-1/4" truss head screw	8400	83.875" Panel Connection H
454	1/4" Washer	8406	Wall Shim
1468	Square to Round Clamp (w/chain	6724	Gate Mounted Pulley Assembly
	link gate option)	6726	Wall Mounted Pulley Assembly
	Aluminum Panel Attachment Angle (May be attached to side panels from factory in some cases)		"Sanislope T"

Note: Wall mounting hardware is shown only for reference purposes and is not included

#### Installation

#### **Required installation tooling:**

- Level (4' preferred)
- 1/2" combination wrench
- 7/16" combination wrench
- Hammer
- Hammer drill (anchored systems only)
- 1/4" Masonry bit (anchored systems only)
- 5/16" drill bit (anchored systems only)
- #2 Phillips bit (2-3)

- Caulk gun
- Variable speed drill (cordless preferred)
- 5/32" drill bit
- Tape measure
- Chalk line
- Denatured alcohol
- Shop rags
- 5/16" Nut driver bit

#### **Optional tools**

- Vise grips 8" locking C-clamps (3 pair recommended)
- WD40 or other thread lubricant

# Section A Panel Identification

Refer to the floor plan supplied.

Depending on the nature of your Kennel Project you will have either letter and or number designations on the tag(s) wired to the top of the panel as shown in Figure 1.

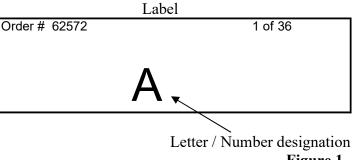
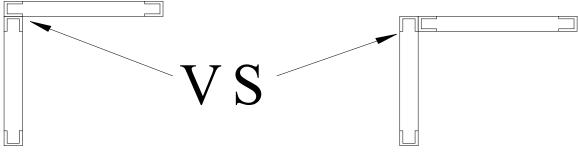


Figure 1

Each connection point of the panels should be aligned as shown on the floor plan. Note the difference in the alignment of the two panel connections shown in Figure 3. It will make a difference as to how your runs go together if you do not align the panels properly and, in some cases, they may not go together at all.



### Section B Panel Assembly

Sometimes the length or layout of the division panels in a kennel requires that they be made up from multiple panels. Each of the multiple panel assemblies must be connected before assembling the runs. Referring to the Floor Plan and using the Panel Identification Tag as described in Section A, make all multi-division panel connections that are in line with one another using the following steps:

- 1. Place the rear division panel on the floor-T with the rear edge of the panel flush with the rear edge of the floor-T.
- 2. Set the Panel Connection H extrusion on the floor-T and slide it over the front edge of the rear division panel.
- 3. Using six of the #10-32 x 5/8" TEK screws provided, secure Panel connection H extrusion to the rear panels. (Three screws should be used for each side of the panel, one each in the top middle and bottom). See Figure 3A.

Note: To avoid screw interference, offset the screw location by 1/4 - 3/4" on either side of the panel

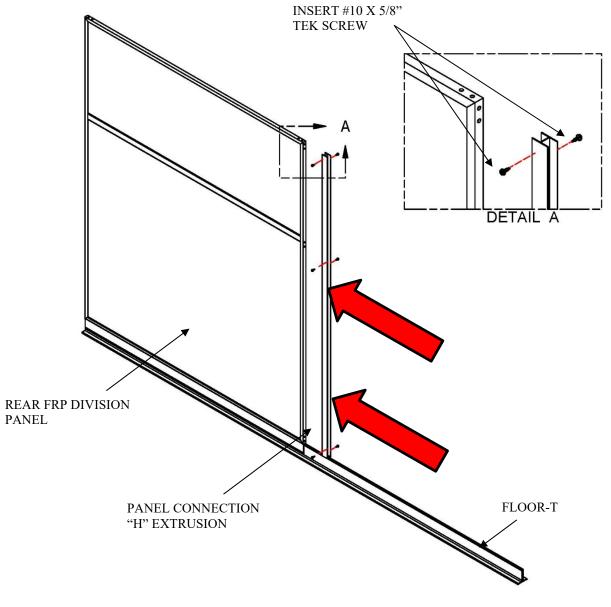


Figure 3A

- 4. Place the front division panel on the floor-T and slide it into the Panel Connection H extrusion.
- 5. Using six of the #10-32 x 5/8" TEK screws provided, secure Panel connection H extrusion to the rear panels. (Three screws should be used for each side of the panel, one each in the top middle and bottom). See Figure 3B.

<u>Note:</u> To avoid screw interference, offset the screw location by 1/4 - 3/4" on either side of the panel

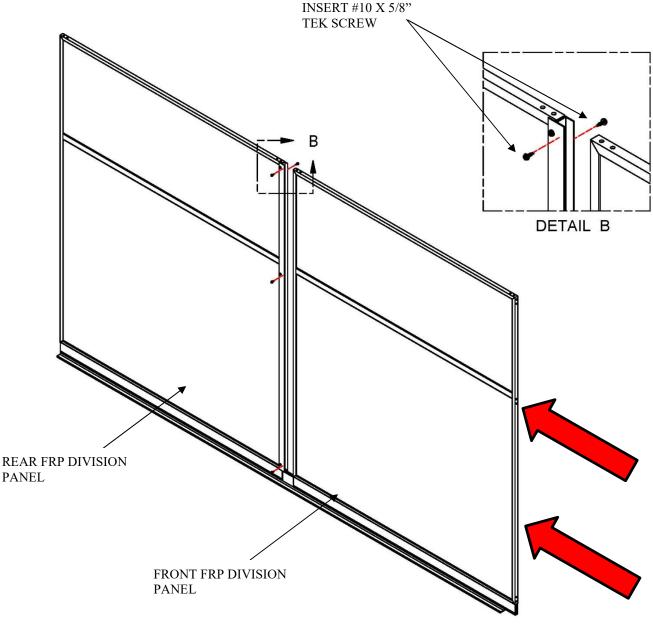


Figure 3B

# Section C Run Assembly

1. Refer to the floor plan and select a starting point for assembling the runs (preferably on the end of a bank of runs at the intersection of the gate/stall front and outside division panel), which is best for your application. Once selected, identify the exact location of the outside corner of that run. Mark both sides of the corner on the floor with a chalk line (or other preferred method) as shown

in Figure 5. **Important:** Make sure that the two lines are perpendicular and in the exact final location desired for the corner of your kennel.

2. If your system is using Silvis Seals, you must apply them to the Sanislope T's now. Orient the "T" as shown in Figure 4. Apply the end blocker by peeling off the backing strip and positioning the blocker at the end of the "T".

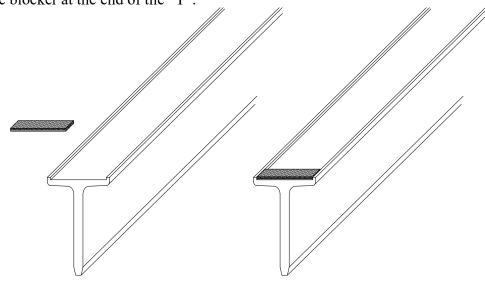


Figure 4

3. Apply the Silvis Seal to the "T" by removing approximately 2 ft. of backing tape. Starting at the end blocker, apply the Seal to the recessed channel in the "T" being careful to orient the Seal in line with the "T". Lay the rest of the Seal in the recessed channel. Carefully pull the remaining backing tape from the "Seal" and using light pressure adhere it to the aluminum as shown in Figure 5.

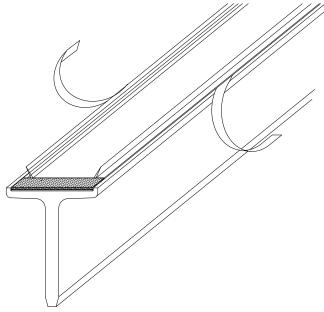


Figure 5

4. Layout the "Sanislope T" sections approximately where they will lie on the final floor plan as shown in Figure 6. Note: be sure that the end blocker that was installed in step 2 is at the outside or gate end of the run. Optional: This system is designed to function equally well whether it is fastened to the floor or not. If you do not want to fasten it the floor skip to step 6; otherwise proceed with step 5.

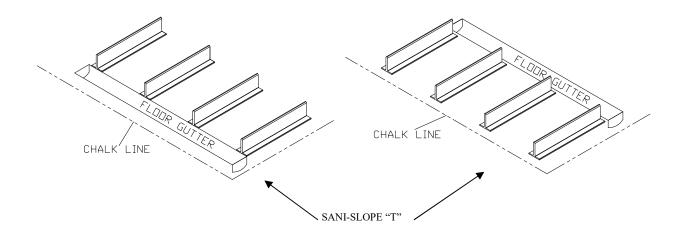
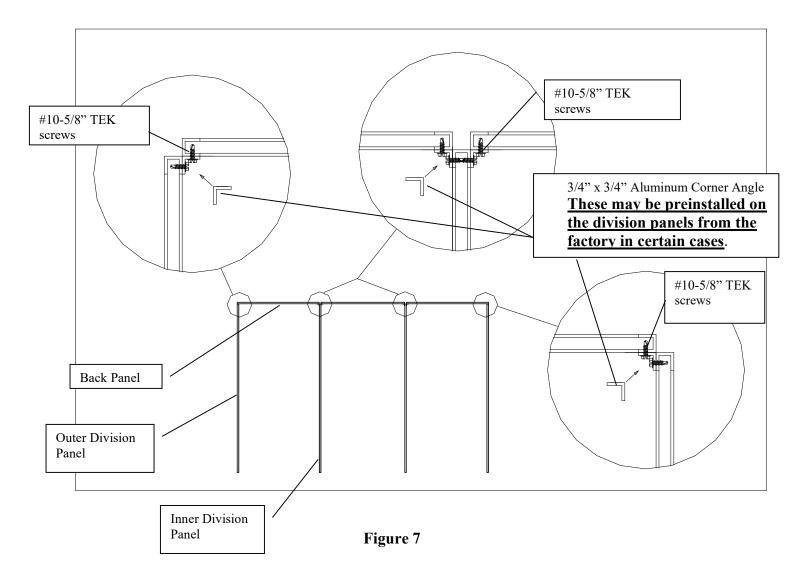


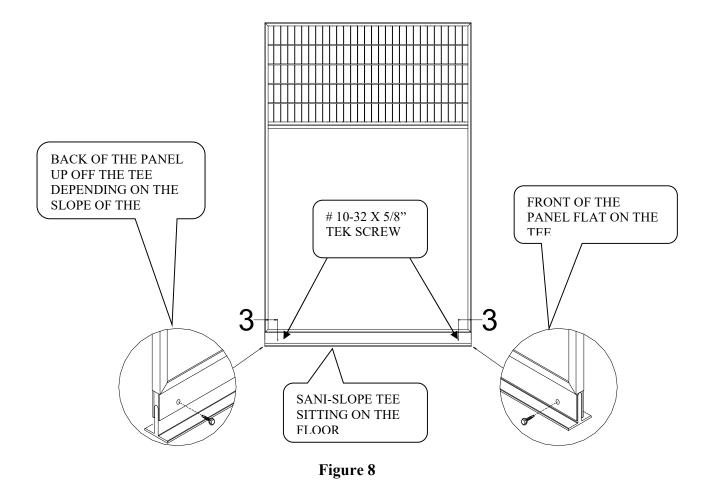
Figure 6

- 5. Using the 5/16" drill bit, pre-drill the "Sanislope T's" for the outside division panels only, 3" from the end, one on each side diagonal from each other. These holes will be used later to anchor the system to the floor.
- 6. Starting from the point you selected in step C-1 place the first "outer division panel" on the corresponding "Sanislope T". See Figure 7 for the sequence in which to assemble the panels.
- 7. Following the floor layout sequence, set the first back panel against the corner of the back edge of the end division panel. Clamp the full-length corner angle in position (see Figure 7). The corner angles are predrilled with clearance holes in the proper locations. Vise grips or C-clamps are recommended to keep the parts from shifting. Fasten the panels together using #10 screws as depicted. Angles should be flush with the tops of the panels. These may be preinstalled on the division panels from the factory in certain cases.
- 8. Position the next division panel and connect to the back panel using the supplied corner angle and #10 screws as depicted.
- 9. Continue placing and connecting division panels and back panels in the proper sequence, paying close attention to the corner layouts, as shown in the enlarged views on Figure 7.



# Section D Leveling the System

- 1. Using a hammer tap all the "Sanislope T's" on the front end of the run, back until they are flush with the front edge of the division panel as shown in Figure 8.
- 2. While the panels remain level, apply downward pressure to the Sanislope T, drill a 11/64" hole at least 1/2" deep, through the "Sanislope "H" at the bottom of the division panels into the "Sanislope T", as shown in Figure 8. After each hole is drilled, drive a #10-32 x 5/8" TEK screw into the hole. Spraying a little WD40 into the hole before driving the screws will simplify the process. (**NOTE:** if your system is using the Silvis Seal, it is the downward pressure on the Sanislope Tee that ensures the Silvis Seal performs properly.)
- 3. Repeat step D-2 for all screw locations shown on Figure 8 for both division panels.
- 4. Repeat steps D-1 through D-3 for all remaining division panels following the same sequence used to assemble the panels as shown in Figure 7. Continue the leveling process for all runs and or banks of runs.

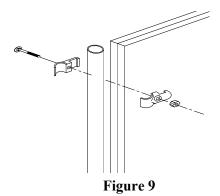


# Section E Gate/Stall Front Hanging

Your system may include chain link or stainless steel gates or stall fronts or both. Use the appropriate instructions for hanging your gates and/or stall fronts.

#### **Chain link Gates/Stall Fronts**

1. Attach the filler pipes to the front end of each division panel with two square-round clamps (it takes two halves to make up one clamp) approximately 6" from either end of the filler pipe using the 5/16" x 1-3/4" carriage bolts and 5/16" nuts provided as shown in Figure 9.



2. Attach the gate/stall front on the front of each run between the filler pipes with two clamps on each side using the 5/16" x 1-1/2" bolts and nuts provided as shown in Figure 10. Note: It takes two halves to make up one clamp. Attach gates/stall fronts to outside division panels using "panel clamps". All other gates/stall fronts will use "triple clamps". To help ensure the safety of the animals the round head of the bolt should be assembled toward the inside of the run. Note: The triple clamps attach two gates/stall fronts together. Therefore, you will have to hang two gates/stall fronts at the same time (see Figure 11).

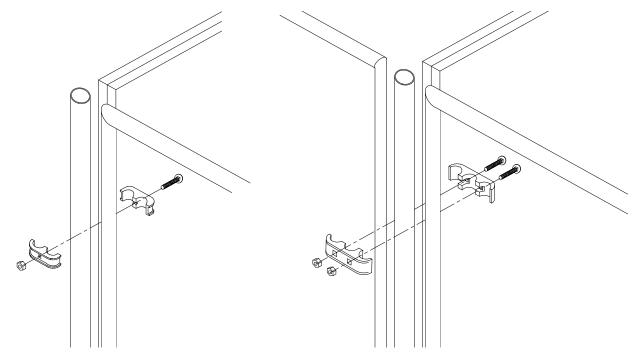
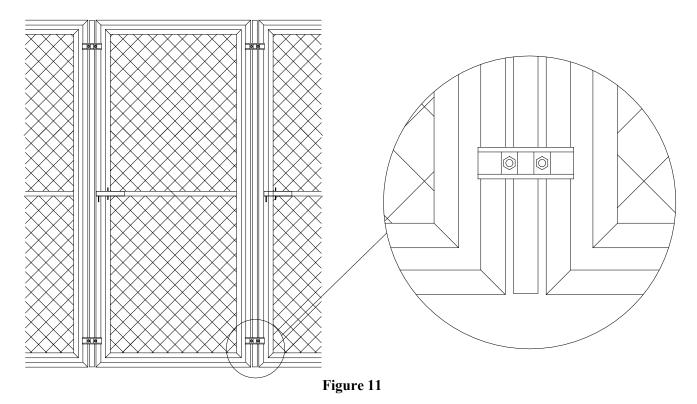


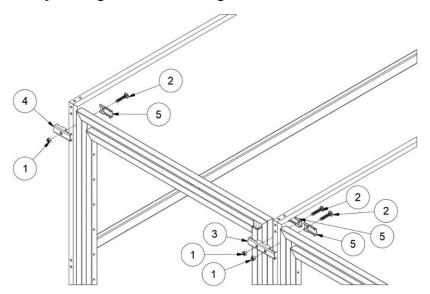
Figure 10



3. Adjust the gate latch following the instructions in section J, "Gate/Stall Front Latch Adjustment".

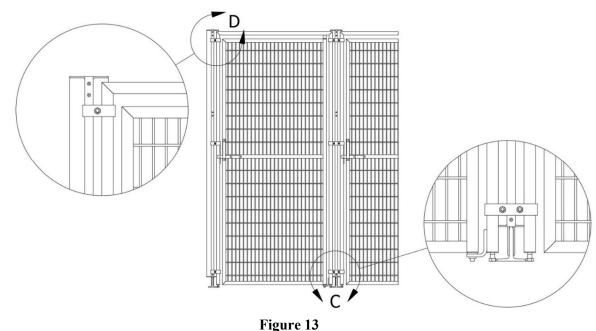
#### **Stainless Steel Gates/Stall Fronts**

- 1. Attach the gate/stall front on the front of each run between the division panels with three clamps on each side using the 5/16" x 1-3/4" bolts and nuts provided as shown in Figure 12. Note: It takes two halves to make up one clamp. Attach gates/stall fronts to outside division panels using "square 1" panel clamps". All other gates/stall fronts will use "square 1" triple clamps". To help ensure the safety of the animals the round head of the bolt should be assembled toward the inside of the run. Note: The triple clamps attach two gates/stall fronts together. Therefore, you will have to hang two gates/stall fronts at the same time (see Figure 13).
- 2. Gates/Stall fronts should be mounted so the top frame tube is flush with the top of the side panel. (If using top covers, gates should be mounted 1/4" below flush to allow room for the mounting flange.)
- 3. Adjust the gate latch following the instructions in section J, "Gate/Stall Front Latch Adjustment".



Parts List						
ITEM	PART NUMBER	DESCRIPTION				
1	424	5/16-18 SS nut				
2	1771	5/16-18 x 1.75" SS carriage bolt				
3	8081	1in to 0.75in_Triple Gate Clamp				
4	8082	1in to 0.75in_Double Gate Clamp				
5	8083	1in to 0.75in_Single Gate Clamp				

Figure 12

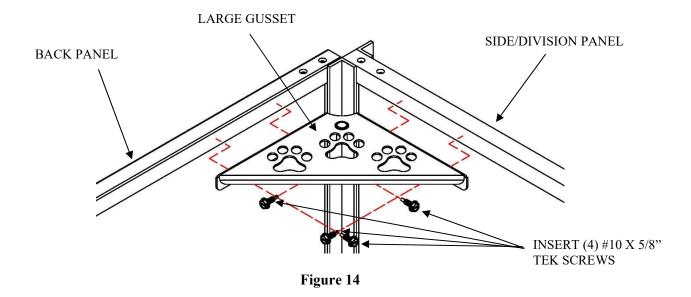


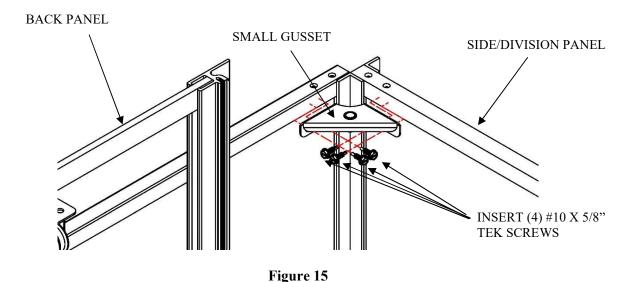
# **Section F Gusset Installation**

Unless your system is using top covers, you will receive corner gussets and/or overhead bracing to increase the strength and stability of the Sani-Kennel run.

1. Starting in the rear of the kennel, place a gusset against the back and side panel. Align the gusset's upper surface flush with the top of the panels and secure to the aluminum framework using the supplied Tek screws.

<u>Note:</u> If the kennel run is 36" wide or smaller and has a transfer door in the back panel, a small gusset should be used as shown in Figure 15. All other applications will use the large gusset shown in Figure 14.





- 2. Repeat step one for the opposite rear kennel corner.
- 3. Moving to the front of the kennel, use the previous method and supplied Tek screws to attach a large gusset to the side panel and gate. See Figure 16.

Note: Top surface of gate and side panel should be flush with each other before attaching gusset.

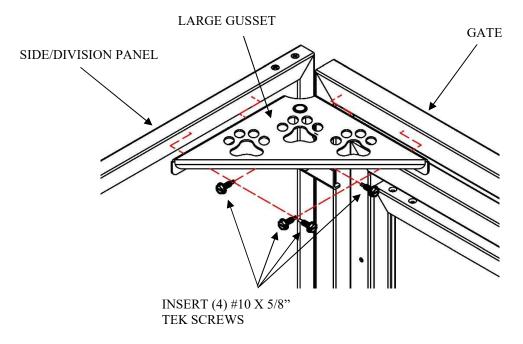
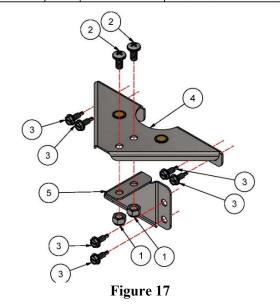


Figure 16

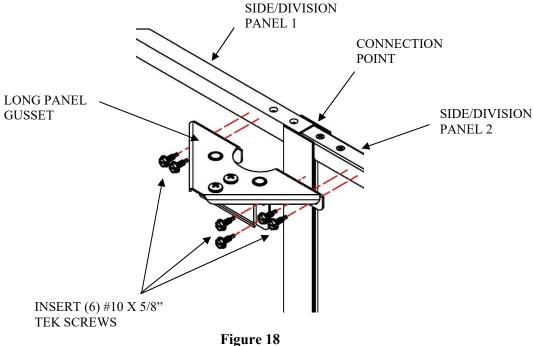
- 4. Repeat step three for the opposite front kennel corner.
- 5. For kennels deeper than eight-foot, an additional gusset is required at the side panel connection point. This gusset may or may not be preassembled from the factory. To assemble see Figure 17.

	Parts List				
ITEM	QTY	PART NUMBER	DESCRIPTION		
1	2	421	1/4-20 Nylock Nut - SS		
2	2	933	1/4-20 x 1/2" Truss		
			Head Screw - SS		
3	6	2222	#10 x 5/8" Self Drilling		
			Screw - SS		
4	1	8415	Long Panel Horizontal		
			Gusset - SS		
5	1	8416	Long Panel Vertical		
			Gusset - SS		



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6. Once gusset has been assembled, ensure that the top of the gusset and top of the panel are flush. Then, attach gusset to the side panel connection point using the supplied Tek screws, as shown in Figure 18.



7. Repeat step six for the opposite kennel side.

### **Section G Overhead Bracing Installation**

Some systems may require the use of overhead bracing in addition to the corner gussets to further increase the strength and stability of the Sani-Kennel run. If required, all bracing and mounting hardware will be included.

1. Place overhead brace diagonally on top of the previously installed gussets. The front of the brace should be on the hinge side of the gate as shown in Figure 19.

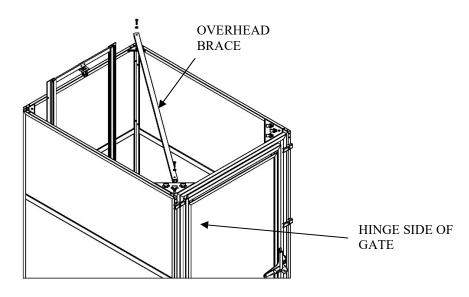


Figure 19

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- 2. Using one of the supplied screws and washer, loosely attach the brace to the threaded insert in the rear gusset. Do not fully tighten!
- 3. Next, loosely attach the brace to the threaded insert in the front gusset. See Figure 20.

<u>Note:</u> It is unlikely that the front hole in the overhead brace will line up exactly with the threaded insert in the front gusset. Pushing on the side panel where it connects to the hinge side of the gate will allow the holes to line up and will square the system.

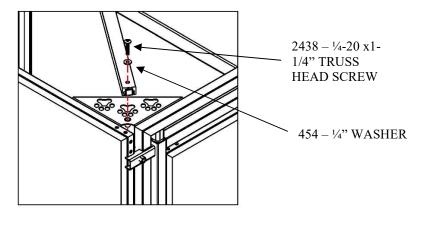


Figure 20

4. Once the system is square, fully tighten the screws attaching the overhead brace.

The Sani-Kennel system is designed to work equally well whether it is anchored to the floor or not. If you desire to anchor it to your floor proceed with Section H otherwise skip to Section I.

## Section H Anchor System to Floor

**Important:** Before anchoring your system to the floor verify the entire installation is where you want it, square to the lines marked in step C-1 and level. Once you have verified this, you can anchor the "Sanislope T's" on the outside division panels to the floor using the following steps:

- 1. Using the holes you drilled in step C-3 as a template drill a 1/4" hole using a hammer drill, with a 1/4" masonry bit to a minimum of 1-1/2" deep.
- 2. Insert a 1/4" x 1-1/2" rawl spike provided into the hole and drive it in with a hammer until the "Sanislope T" is tight against the floor and the head of the Rawl Spike is tight against the "Sanislope T".
- 3. Repeat steps H-1 and H-3 for all hole locations shown in Figure 21.
- 4. Repeat steps H-1 through H-4 for all outside division panels.

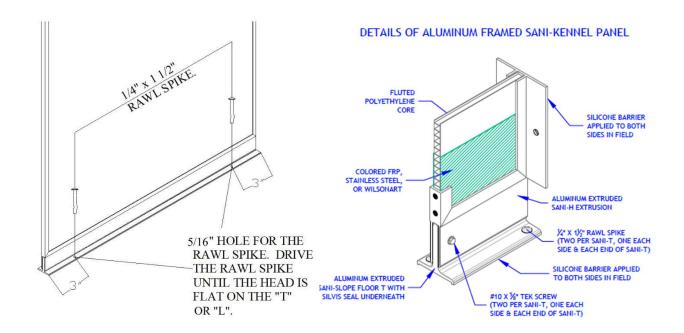
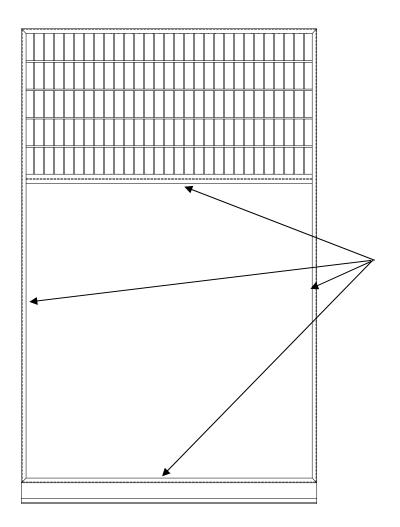


Figure 21

### Section I Sealing

- 1. Clean along the edge of all the "Sanislope T's" where they meet the concrete using denatured alcohol applied to shop rag.
- 2. Apply a thin bead of sealant provided along the seam created between the "Sanislope T" and the concrete as shown in Figure 21 above.
- 3. If your system is built with Stainless Steel panels you will need to seal the perimeter of the stainless steel on both sides of the panels. Apply a thin bead and wipe away excess with denatured alcohol applied to a shop rag. Refer to Figure 22.



APPLY A BEAD OF SILICON ALONG JOINT WHERE THE STAINLESS STEEL IS INSERTED IN TO THE ALUMINUM FRAMEWORK.

DO THIS FOR EACH SIDE OF THE PANEL.

Figure 22

# Section J Gate/Stall Front Latch Adjustment

During shipment and installation, gate assemblies may be forced out of adjustment. If your gate does not latch automatically when pushed closed, the latch can be adjusted by following these instructions.

### **Chain link Gate/Stall Front** (Reference Figure 23)

During the following adjustment process you may need to move the wire mesh slightly. To do so, use a small block of wood and hammer to tap the wire out of the way.

1. Loosen the latch catch bolt just enough to allow the latch catch to slide up and down.

- 2. Tap the latch catch up or down until the inside latch bar handle rests on the horizontal brace pipe and the latch bar rests in the bottom of the latch catch.
- 3. Check to insure the pendant swings freely. If it catches on the latch catch bolt or you've run out of adjustment in the latch catch slot you may have to raise the gate inside of its frame.
- 4. If the gate needs to be moved, loosen the top and bottom hinge bolts and raise (or lower) both the gate and the top hinge as needed then tighten both hinge bolts.
- 5. Re-adjust the latch catch.
- 6. Tighten latch catch bolt.

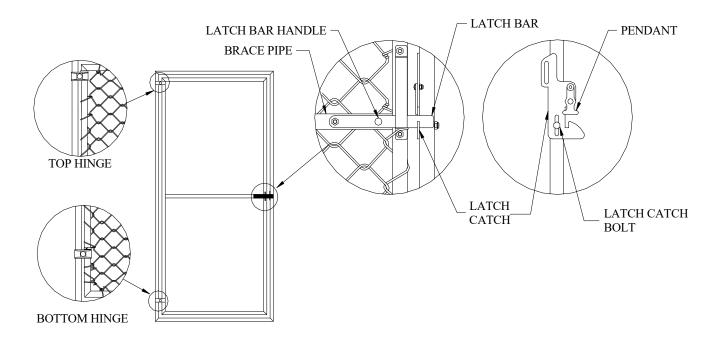


Figure 23

#### **Stainless Steel Gate/Stall Front** (Reference Figure 24)

- 1. Loosen the latch catch bolts just enough to allow the latch catch to slide up and down.
- 2. Tap the latch catch up or down until the inside latch bar handle rests on the inside of the keeper and the latch bar rests in the bottom of the latch catch.
- 3. Tighten latch catch bolts.

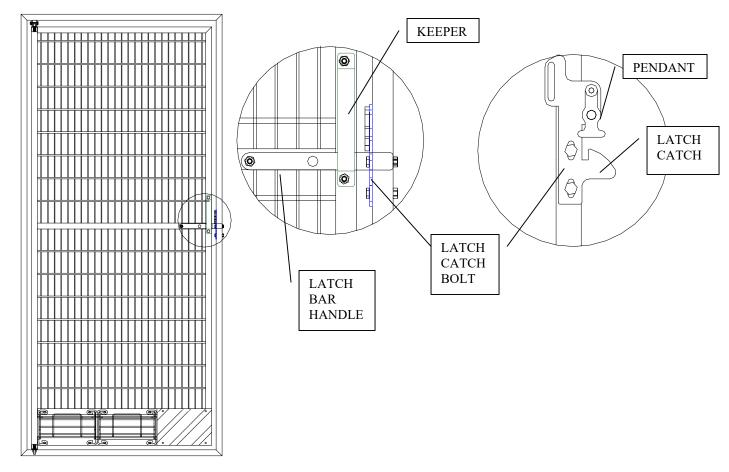


Figure 24

#### **Maintenance**

Over time, your Sani-Kennels might require adjustments, lubrication, or replacement parts to remain in top working condition. We recommend a yearly maintenance schedule to lubricate door hinges, adjust gate locks and any other moving parts. A standard, industrial grease works well. If your kennels need any replacement parts, our professional sales engineers will be happy to review your original order and assist you.

