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**FOAMSIDE®**  
**TRUCK SHELTER w/ INTEGRATED**  
**AQUASHIELD®**  
**RAIN SEAL SYSTEM**  
**SERIES FSR-AQS**  
**TUFSTEEL® GALVANIZED STEEL FRAMING**

**Installation Instructions**

FORM NO: 4F-FSR-AQS-INT-1/07



Do not install this product unless you read and understand the Warnings and Installation Instructions contained in this manual. Failure to do so could result in serious injury or death.

# KELLEY FOAMSIDE TRUCK SHELTER W/ INTEGRATED AQUASHIELD RAIN SEAL SYSTEM

Kelley FoamSide® Truck Shelters with the integrated AquaShield® Rain Seal System are custom built for each application. Installation procedures are the same for all Series FSR-AQS Truck Shelters regardless of size. Installation requires two people and a forklift truck or similar device to lift and position the shelter components. Lifting equipment to be determined by installer.

## **WARNING**

*Improper installation of anchoring devices or installation into aged or unsound concrete or other faulty or inadequate building wall construction could result in serious injury or death, as well as premature product wear, product failure or property damage.*

*Inadequate lifting equipment or unsafe lifting practices can cause a load to fall, tip or swing unexpectedly. Make sure lifting devices are in good condition and have a rated capacity of at least 500 lbs. at the lifting angle being used. Never allow anyone to stand on or near the dock shelter component when it is lifted or placed. Failure to follow this warning could result in serious personal injury or death to bystanders if component unexpectedly falls, tips or swings. If you have any questions contact your supervisor or your local Kelley distributor for assistance.*

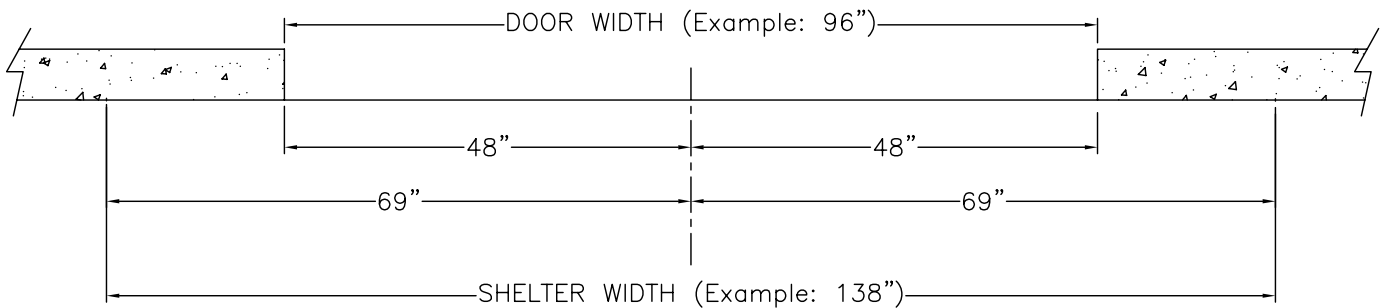
*Assembly of components should be performed in such a way so as to maintain cleanliness of equipment before final installation. Lifting equipment to be determined by installer (man lift and forklift or boom lift typical). Wear safety glasses, gloves, hard hats, safety shoes and all necessary protective clothing.*

### MANDATORY INSTALLATION NOTE:

To insure proper functioning of the AquaShield rain seal system, this FoamSide truck shelter must be applied so that top of shelter is in a range of from 14'-10" to 15'-2" off grade. Installation of the top of the shelter at less than 14'-10" off grade may result in damage to the AquaShield. Installation of the top of the shelter at greater than 15'-2" of grade will reduce or eliminate the AquaShield's rain sealing effectiveness. Correctness of product sizing for various applications must be established at the time of equipment order.

**1. Mark centerline location of door opening width** on dock floor. Take ½ of the truck shelter or wiper seal head frame width and mark this distance on either side of door centerline.

**NOTE:** This will determine position of outside edges of foam side members.

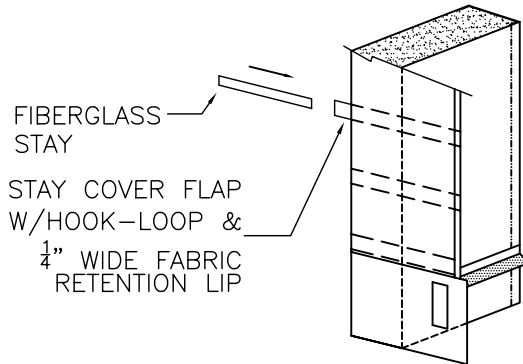


**2. Attach three (3) sets of mounting brackets per side member or (4) sets on side members 11'-0" high or higher** with screws provided. The type of mounting brackets ordered depends upon the mounting position of the side member. (See Foam Side Member Mounting Details) Two (2) sets of brackets should be attached as close to 3" from the top and bottom of side member as possible. One (1) set of brackets should be attached at or near the middle of side member. When an extra bracket set is supplied for taller side members space it and the other middle bracket evenly between end brackets.

**NOTE:** Final location of the brackets (conforming as closely as possible to requirements detailed in steps 2 and 4) to be determined by the installer to suit spacing of the mortar joints or other conditions.

**3. Install fiberglass stays into side curtains.** Fiberglass stays are shipped loose and included with mounting hardware. Lift stay cover flap (retained with hook-loop) located along outside edge of side members. Under the flap and slightly recessed you will find a 1/4" wide lip of fabric folded toward the front of the shelter. As you insert stay into pockets make sure that outside edge of stay is tucked under fabric lip and securely close stay cover flap. Note: internal fabric retention lip keeps stays from pushing out of side curtain.

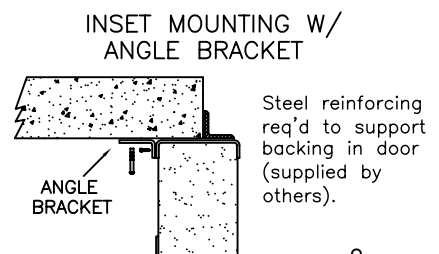
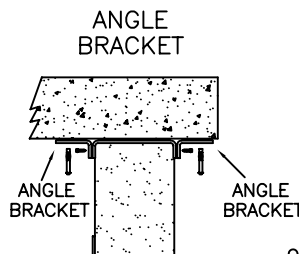
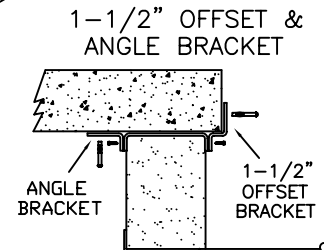
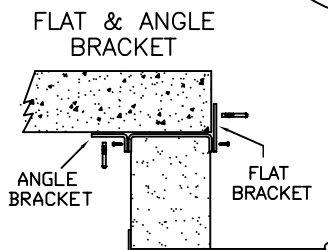
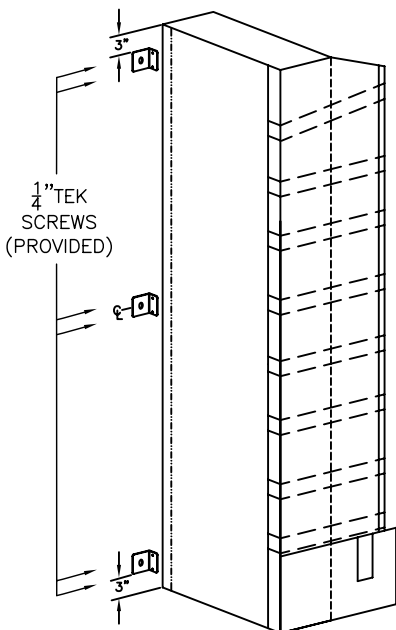
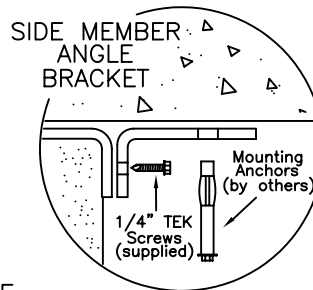
**! IMPORTANT !**  
 INSERT STAY INTO  
 POCKET AND UNDER 1/4"  
 RETENTION LIP LOCATED  
 UNDER HOOK-LOOP  
 RETAINED FLAP. CLOSE  
 FLAP SECURELY



**4. Mount foam side members to wall.** Side members should be placed on marks established in step 1, with bottom of the side member even with dock floor or at the top of raised dock bumpers on low docks. Side members must be plumb from top to bottom with draft pad flaps facing inward.

**NOTE:** If mounting brackets extend into door opening, trim off or bend brackets back against doorjamb. If optional foam side member steel protectors are provided, anchor protectors onto dock face 1" below side member and centered under side member.

SIDE MEMBER MOUNTING  
 BRACKETS  
 (ATTACHED TO STEEL BACKING  
 WITH 1/4" TEK SCREWS  
 PROVIDED)

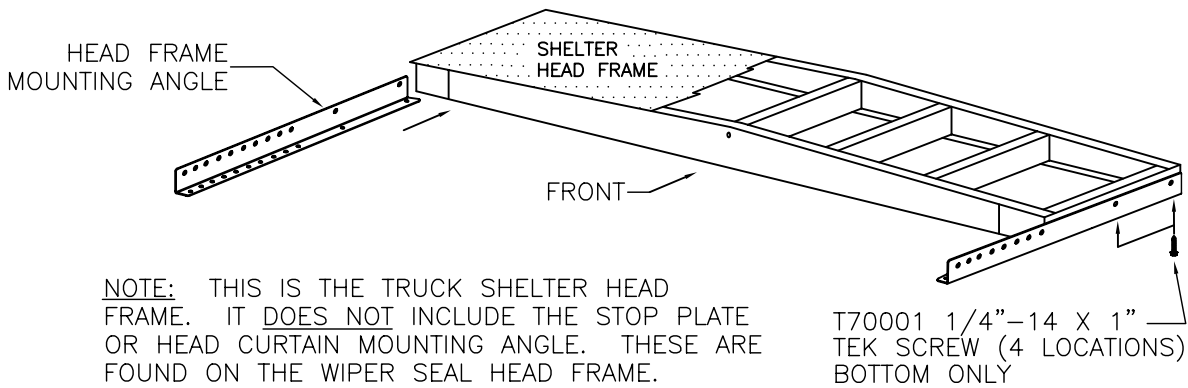


**SUGGESTED MOUNTING METHODS: (Mounting anchors not included)**

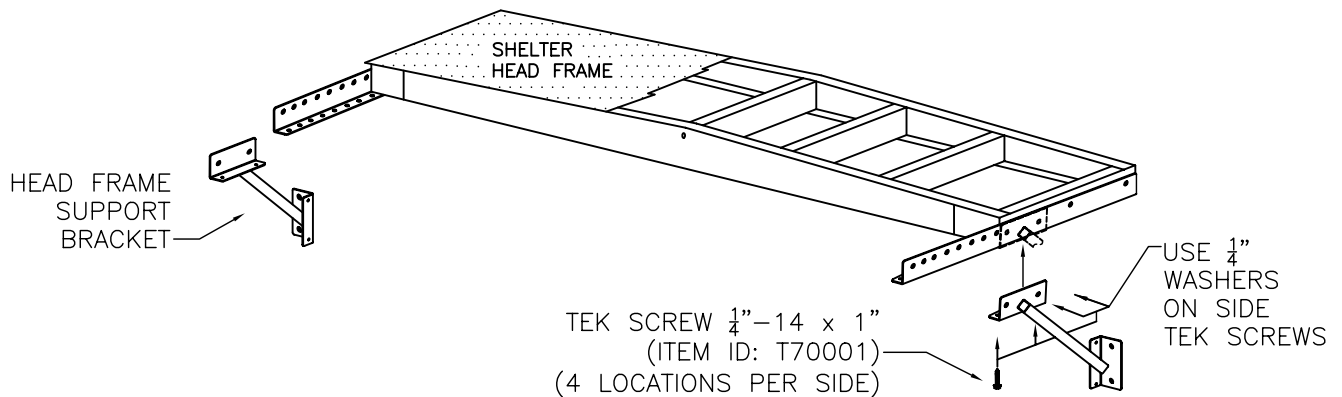
**MASONRY BUILDING WALLS:** Try to hit mortar joints. Use 1/2" or 3/8" x 3" expansion anchors. Use through-bolt fastening if anchors will not hold, 3/8" threaded rod is recommended.

**METAL BUILDING WALLS:** Through-bolt fastening required. Use a back-up plate (steel or wood) to support bolts or anchor through existing building horizontal and vertical structural members.

**5. Attach head frame mounting angles to truck shelter head frame.** Position mounting angles as shown with long leg of angle against ends of head frame. Fasten TEK screws through holes in short leg of head frame bracket into bottom leg of head frame. **Note: Truck shelter head frame does not have stop plate on front or head curtain mounting angle on bottom. These items are found on the wiper seal head frame.**

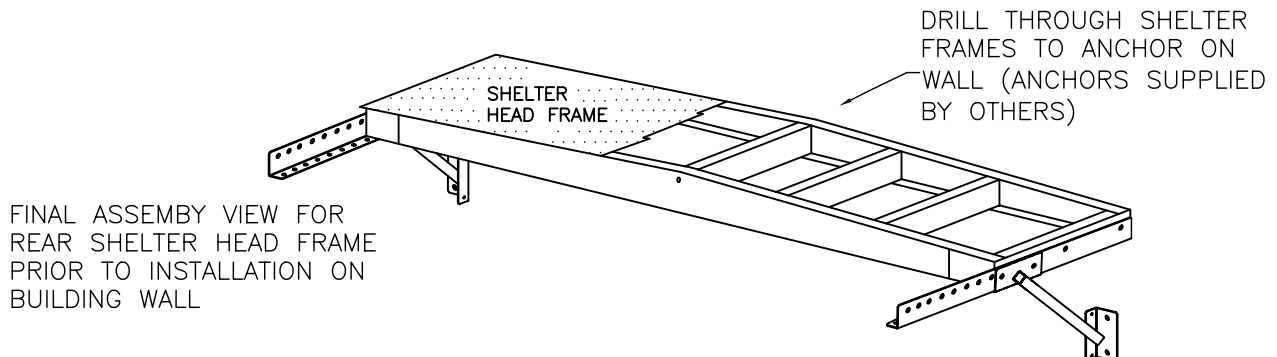


**6. Connect shelter head frame support brackets to wiper seal mounting angles and ends of shelter head frame.** Fasten TEK screws through two holes on side and bottom of support bracket, through mounting angle, and into end of head frame. Front of support bracket should be even with front of head frame.



**7. Mount shelter head frame to wall.** Center head frame on top of foam side members, taking care to avoid damage to side member cover material. **It is necessary to anchor head frame to building in three (3) locations**, one on center and two approx. 12" from each end. For mounting on metal building walls, a factory installed rear brace on head frame is **required**. Three (3) anchors for this style of head frame are recommended (two anchors evenly spaced is acceptable). **Mounting anchors must support 1150 lbs in tension.**

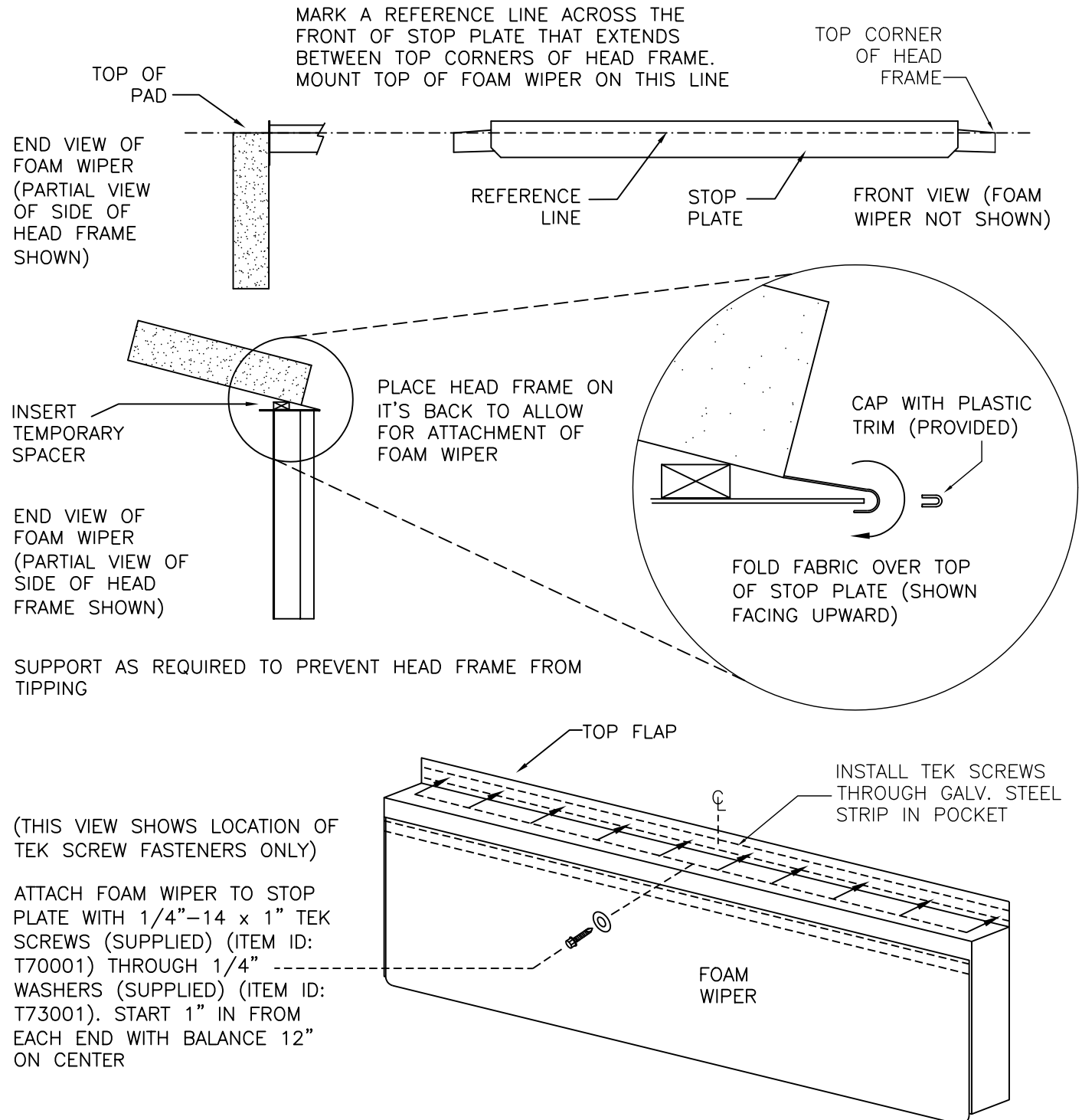
**8. Attach head frame support brackets to building wall.** **The area where support bracket bottom angle and building wall meet must be able to support a load of 1150 lbs perpendicular to building wall and an 1150 lb. shear force. Mounting anchors must support 1150 lbs in tension.** Inadequate wall structures must be reinforced prior to final attachment of head frame brackets.



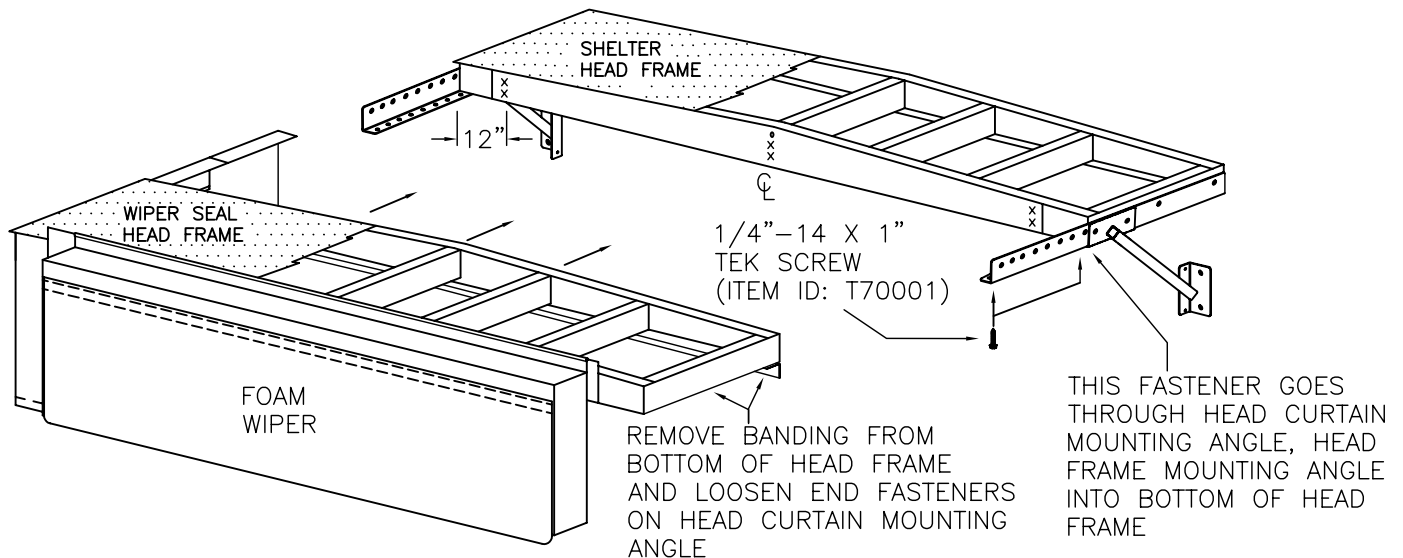
**9. Attach foam wiper pad to wiper seal head frame stop plate.** Position back of wiper seal head frame on the ground and secure from tipping over. Mark a reference line on the front of the stop plate that extends between the top corners of head frame. Mount top of foam wiper even with this reference line.

**NOTE:** Clamp a temporary 1" to 2" spacer (by others) between back of foam wiper and front of top plate. This provides the foam wiper with a forward bias after attachment.

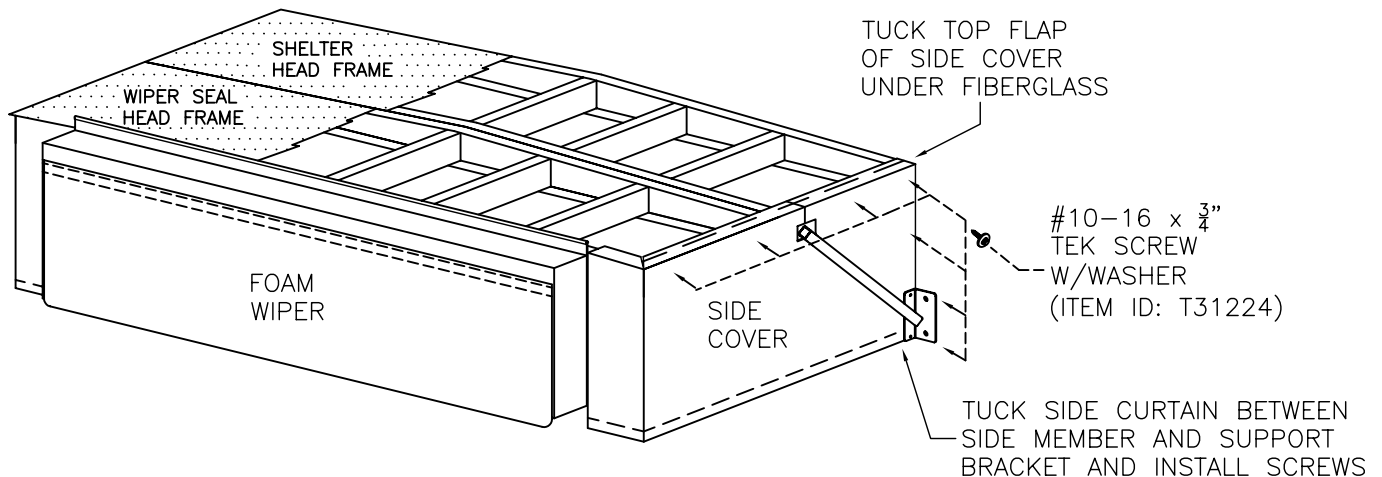
Screw through galvanized steel strip (located inside pocket in top flap) and stop plate on 12" centers with self-drilling TEK screws (provided). A portion of the top flap of the foam wiper will extend above the top of the stop plate. Fold this fabric over the top of edge of the stop plate and cap with the plastic trim provided.



**10. Connect wiper seal head frame to truck shelter head frame.** Remove banding from bottom of wiper seal head frame. Loosen TEK screws closest to the ends of the head curtain mounting angle to provide clearance for the wiper seal mounting angle. Slide wiper seal head frame onto mounting angles. Fasten to shelter head frame using (6) TEK screws in a minimum of three (3) areas (center and approx. 12" from each end). Fasten TEK screws through bottom of mounting angle into bottom wiper seal head frame. Re-tighten TEK screws in head curtain mounting angles.



**11. Mount side covers to combined head frame assembly.** Remove TEK screws from shelter head frame fiberglass along top end. Save TEK screws. Insert 1-1/2" flap at top of side covers between fiberglass and steel frame and re-install TEK screws. Fasten side cover to ends of head frame through mounting angle holes.

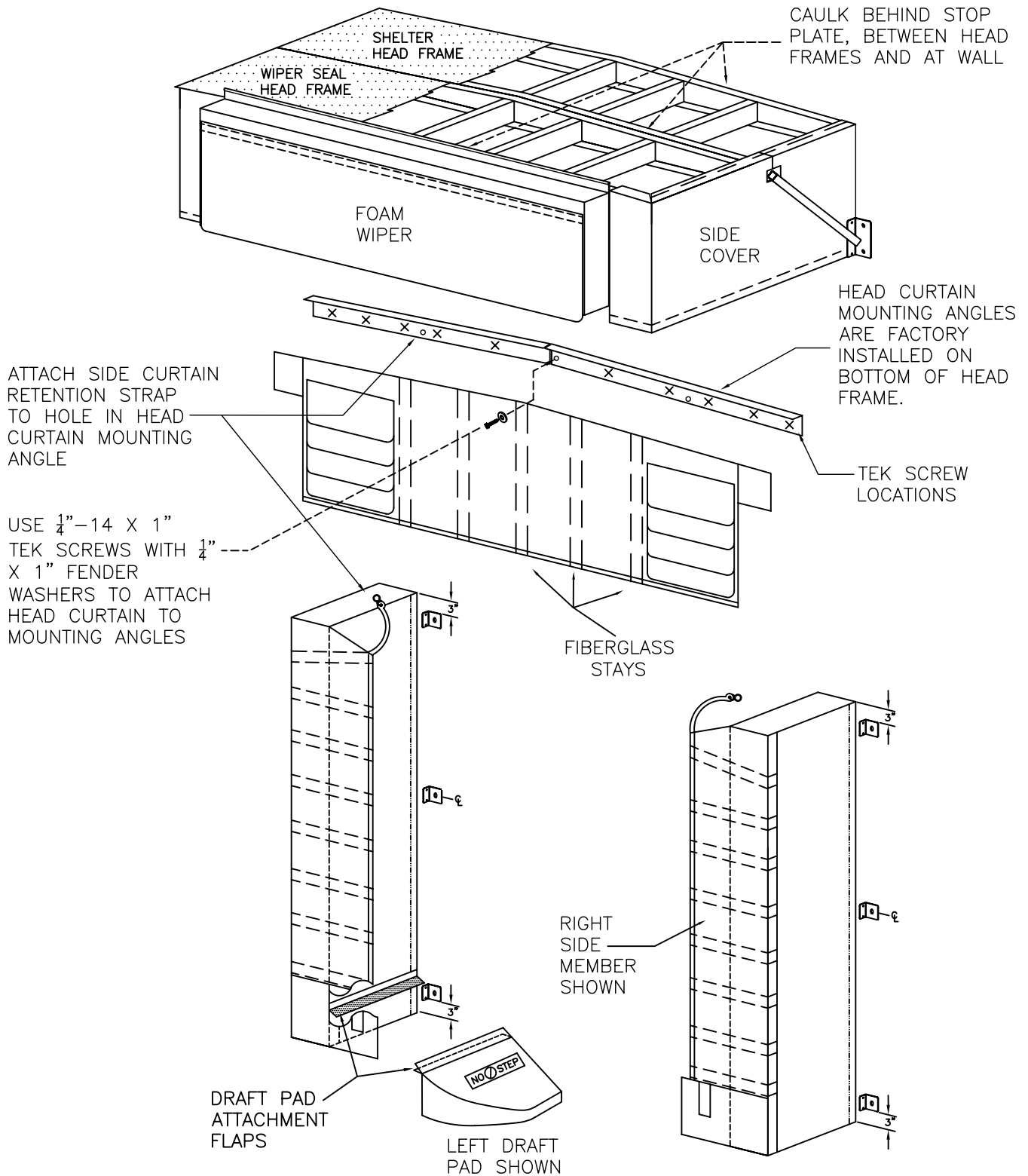


**12. Assemble head curtain to head frame.** Center head curtain on curtain mounting angle and fasten with 1/4" x 1" TEK screws through 1/4" washers. All stays must be fastened to mounting angle. Fasten curtain at each end and in two places evenly spaced above pleats.

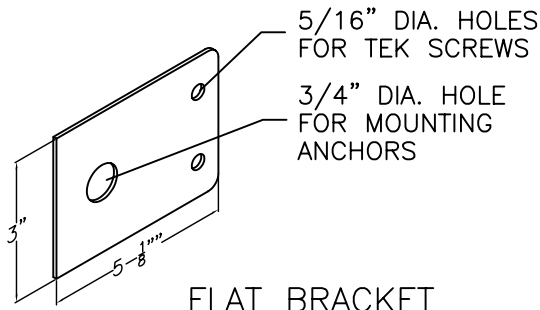
**13. Attach side curtain retention straps to head frame.** Connect strap between grommet tab on top inside edge of side curtain and holes in head curtain mounting angle. Crimp ends of S-hooks.

**14. Connect draft pads to foam side members** using hook and loop. Bottom of pad should be level with dock floor. Ensure hook and loop are securely fastened.

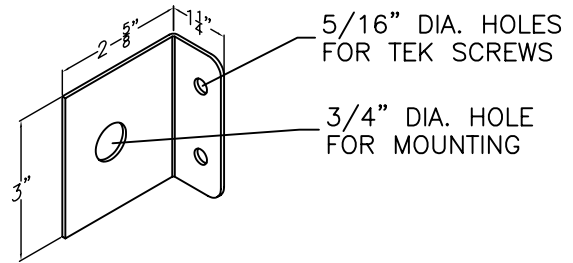
**15. Caulk shelter head and side members at wall** around the outside edges. Caulk between truck shelter and wiper seal head frames and across front of wiper seal head frame behind stop plate. A silicone caulk (supplied by others) is recommended.



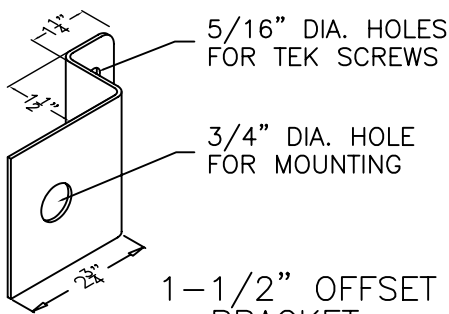
# SIDE MEMBER MOUNTING BRACKETS (14 GAGE GALV STEEL)



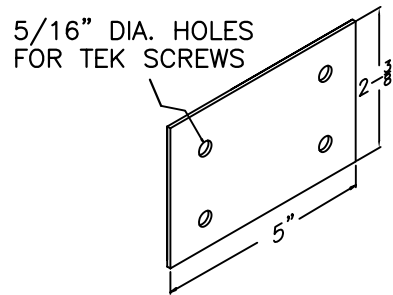
FLAT BRACKET  
(ITEM ID: T31103)



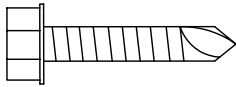
ANGLE BRACKET  
(ITEM ID: T31104)



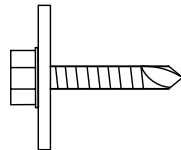
1-1/2" OFFSET BRACKET  
(ITEM ID: T31149)



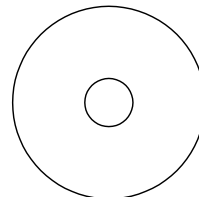
BLOCK-OUT BRACKET  
(ITEM ID: T31179)



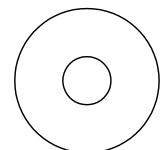
TEK SCREW  
1/4"-14 x 1"  
(ITEM ID: T70001)



TEK SCREW W/ WASHER  
#10-16 x 3/4"  
(ITEM ID: T31224)



1/4" FENDER WASHER  
(ITEM ID: T31248)



1/4" WASHER  
(ITEM ID: T73001)

## WARRANTY

4Front Engineered Solutions, Inc. expressly warrants that this Dock Seal or Shelter will be free from defects in materials and workmanship under normal use for a period of one (1) year from the earlier of 1) 60 days after date of shipment by 4Front Engineered Solutions, Inc. or 2) the date of installation of the Dock Seal or Shelter by the original purchaser, provided the product is properly applied and installed. In the event this Dock Seal or Shelter proves defective in material or workmanship, 4Front Engineered Solutions, Inc. will, at its option:

1. Replace the Dock Seal or Shelter or the defective portion thereof without charge to the purchaser; or
2. Alter or repair the Dock Seal or Shelter, on site or elsewhere, without charge to the purchaser.

The warranty stated in the preceding paragraph is the sole and exclusive warranty for this product AND IS IN LIEU OF ALL OTHER GUARANTEES AND WARRANTIES, EXPRESS OR IMPLIED. This warranty does not cover any failure caused by improper installation or application, abuse, or negligence. Parts requiring replacement due to damage resulting from vehicle impact, abuse or improper installation are not covered by this warranty. Seller assumes no responsibility or liability for (1) consequential damages of any kind which result from the use or misuse of the Dock Seal or Shelter, (2) damage or failure resulting from the use of unauthorized replacement parts or modification of the Dock Seal or Shelter; (3) damage resulting from the misuse of the Dock Seal or Shelter. **THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF, AND THERE IS NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.**

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