

## *model no:*

SH105D, SH105P, SH300D,  
SH300P, SH305D, SH305P,  
SH400D, SH400P,  
SH405D, SH405P



**WABASH VALLEY**

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## **SHADELAND SERIES**

**3-SEAT SINGLE/DOUBLE, 6' SINGLE/DOUBLE, TABLE COMBO  
EXPANDED METAL AND PERFORATED**

## *customer service:*

**ASSEMBLERS:** If you find any parts missing or damaged, or if you're having difficulty assembling your furniture/equipment, call us at:  
Any correspondence concerning our product should be sent directly to our **Customer Service Manager** at:

\* Before calling, have your product model number available.

**1-800-253-8619 (Inside U.S.A.)  
260-352-2102 (Outside U.S.A.)**

Monday thru Friday,  
8:00 AM – 4:30 PM Eastern Time  
(EXCEPT HOLIDAYS)

Wabash Valley Manufacturing, Inc.  
505 E. Main Street  
P.O.Box 5  
Silver Lake, IN 46982 U.S.A.  
FAX: 260-352-2160

## *maintenance:*

Regular inspection and maintenance of all parts, and fasteners is necessary. Tighten all bolts and nuts. Inspect Tops, Seats, Legs, Braces and Fasteners periodically for wear or vandalism. Replace broken or worn parts immediately or take equipment out of service until repairs are made. Use genuine Wabash Valley replacement parts.

To restore plastisol coating to its luster after prolonged use, wash/rinse/dry and use Armor-All ® or similar quality vinyl protectant.

**KEEP THIS ASSEMBLY/SPECIFICATION SHEET FOR FUTURE REFERENCE.**

## *specifications:*

**NOTE: We reserve the right to change specifications without notice.**

Heat fused poly-vinyl coating, finished on inner-metal structure, to an approximate 3/16" thickness. Framework assemblies are finished with powder coating; electrostatically applied and oven cured according to powder manufacturer's specifications. Fasteners are stainless steel to resist corrosion.

### **FRAME:**

Main supports are constructed from 4" x 4" x 9 gage steel tubing with post mounting plates 1/4" thick plate steel. Seat support assemblies are made of 12 gage x 2 3/8" steel tubing. Seat attachment brackets are made of 7 or 10 gage sheet steel. The table mounting brackets are made of 1/4" plate steel. The middle connecting plates are made of 3/8" plate steel. Gusset supports are made of 14 gage sheet steel. All seat assemblies are zinc plated prior to powder coating.

### **TOP & SEATS:**

Top and seats use fabricated 3/4" #9 expanded steel mesh and 12 gage sheet steel for the perforated. Both types of fabricated metals are machine rolled forming the top and seat's rolled sides. Top and seat frame mounting brackets are 10 gage sheet steel. Top's center support brace, running the length of the top, is 1/4" x 1 1/2" flat bar steel. The ends of the rolled sides, of the top and seats, use a 1/2" diameter steel rod, to add support on expanded steel mesh only.

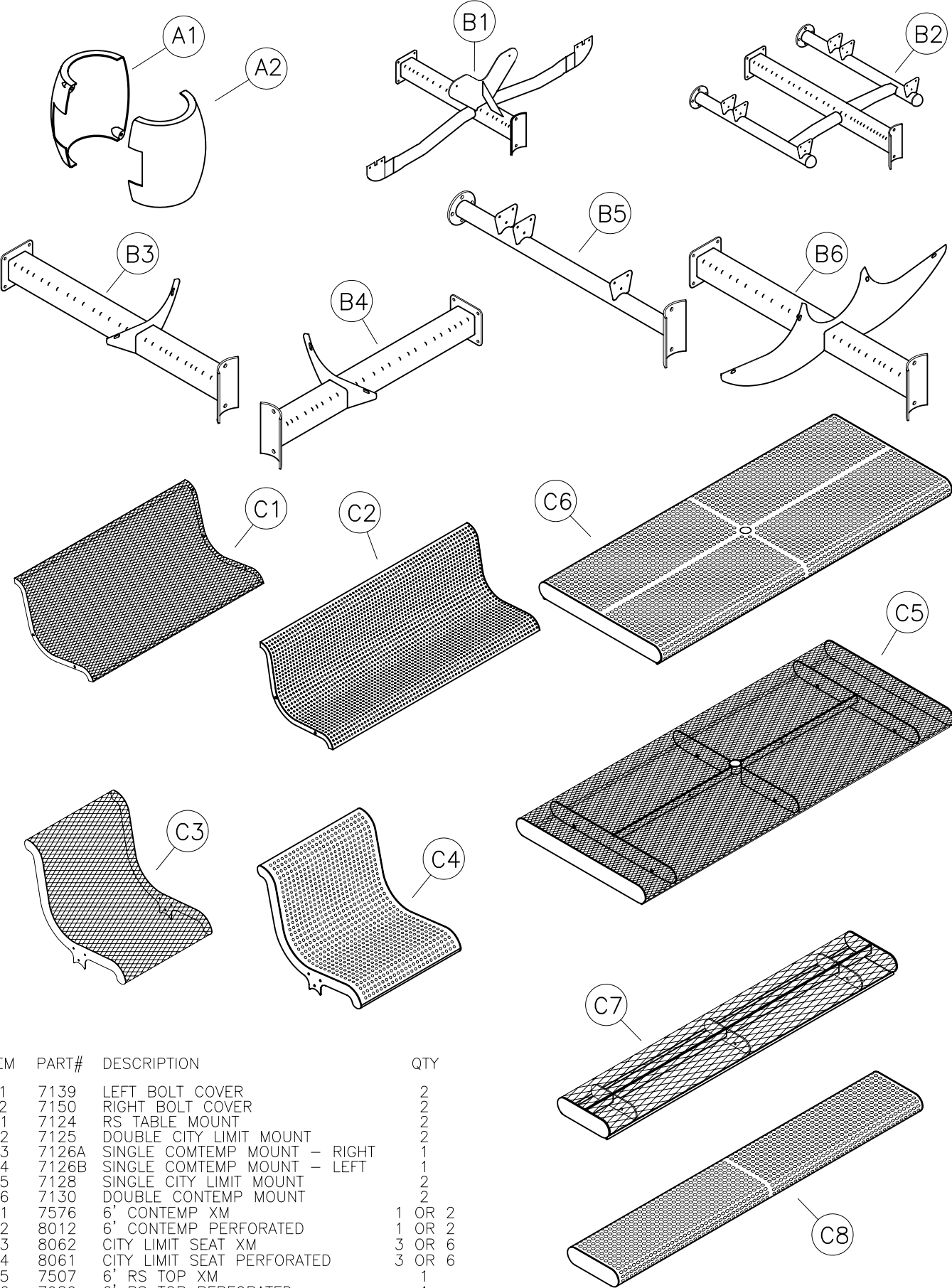
### **ROOF & SUPPORT:**

The roof uses fabricated 3/4" #9 expanded steel mesh and 14 gage sheet steel for the perforated. The edges of the expanded steel mesh are made of 14 gage sheet steel and the ends of the rolled sides use 5/16" rod to add support. The center roof strip is made of 14 gage sheet steel. Cross support tubes are made of 12 gage x 1 5/8" steel tubing with self locking nut inserts at each end. The support wings are made of 3/8" aluminum plate.

### **POST:**

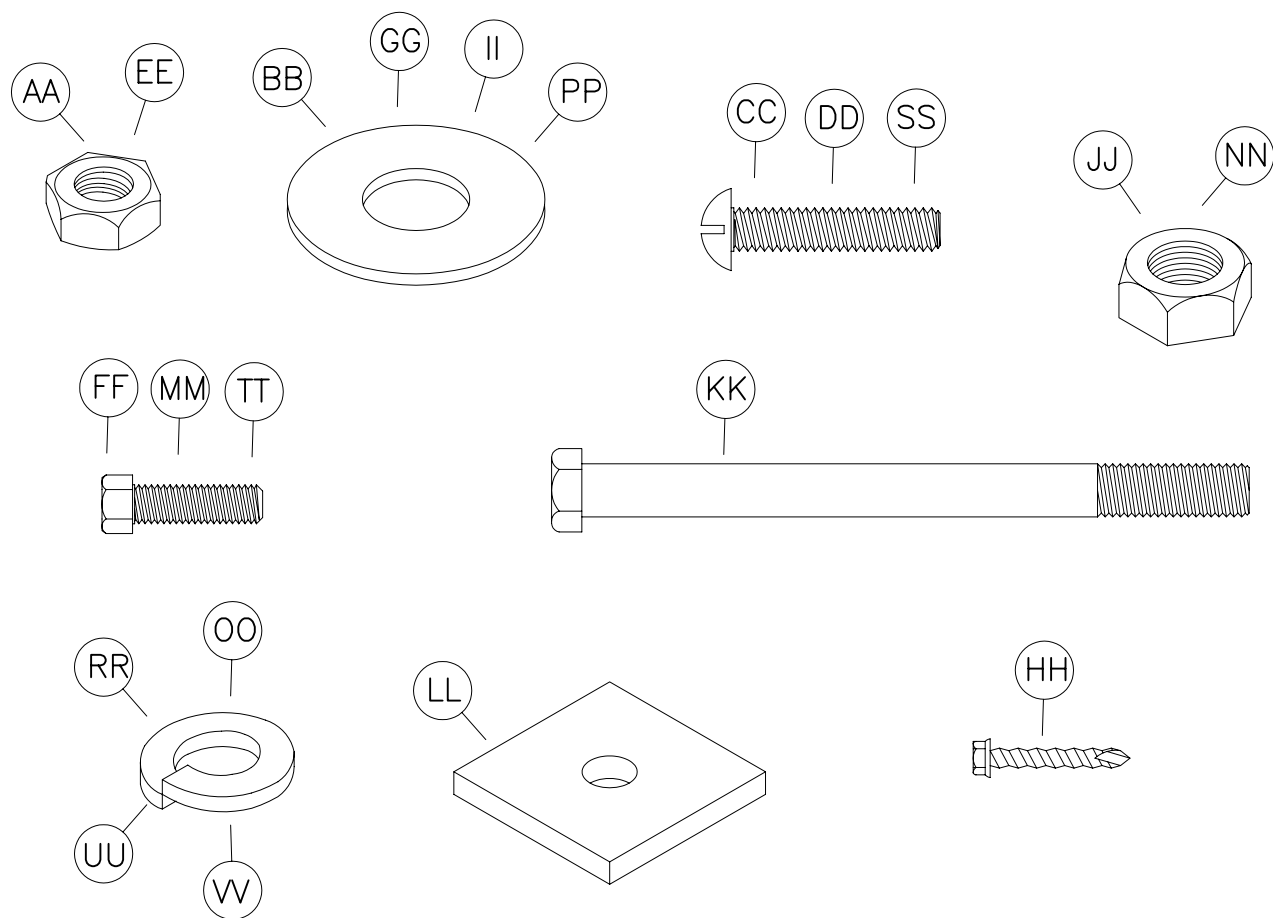
The posts are made of 5" schedule 40 structural grade aluminum pipe.

parts identification:



ITEM	PART#	DESCRIPTION	QTY
A1	7139	LEFT BOLT COVER	2
A2	7150	RIGHT BOLT COVER	2
B1	7124	RS TABLE MOUNT	2
B2	7125	DOUBLE CITY LIMIT MOUNT	2
B3	7126A	SINGLE COMTEMP MOUNT - RIGHT	1
B4	7126B	SINGLE COMTEMP MOUNT - LEFT	1
B5	7128	SINGLE CITY LIMIT MOUNT	2
B6	7130	DOUBLE COMTEMP MOUNT	2
C1	7576	6' CONTEMP XM	1 OR 2
C2	8012	6' CONTEMP PERFORATED	1 OR 2
C3	8062	CITY LIMIT SEAT XM	3 OR 6
C4	8061	CITY LIMIT SEAT PERFORATED	3 OR 6
C5	7507	6' RS TOP XM	1
C6	7989	6' RS TOP PERFORATED	1
C7	7546	612 SEAT XM	2
C8	8007	612 SEAT PERFORATED	2

## parts identification continued:



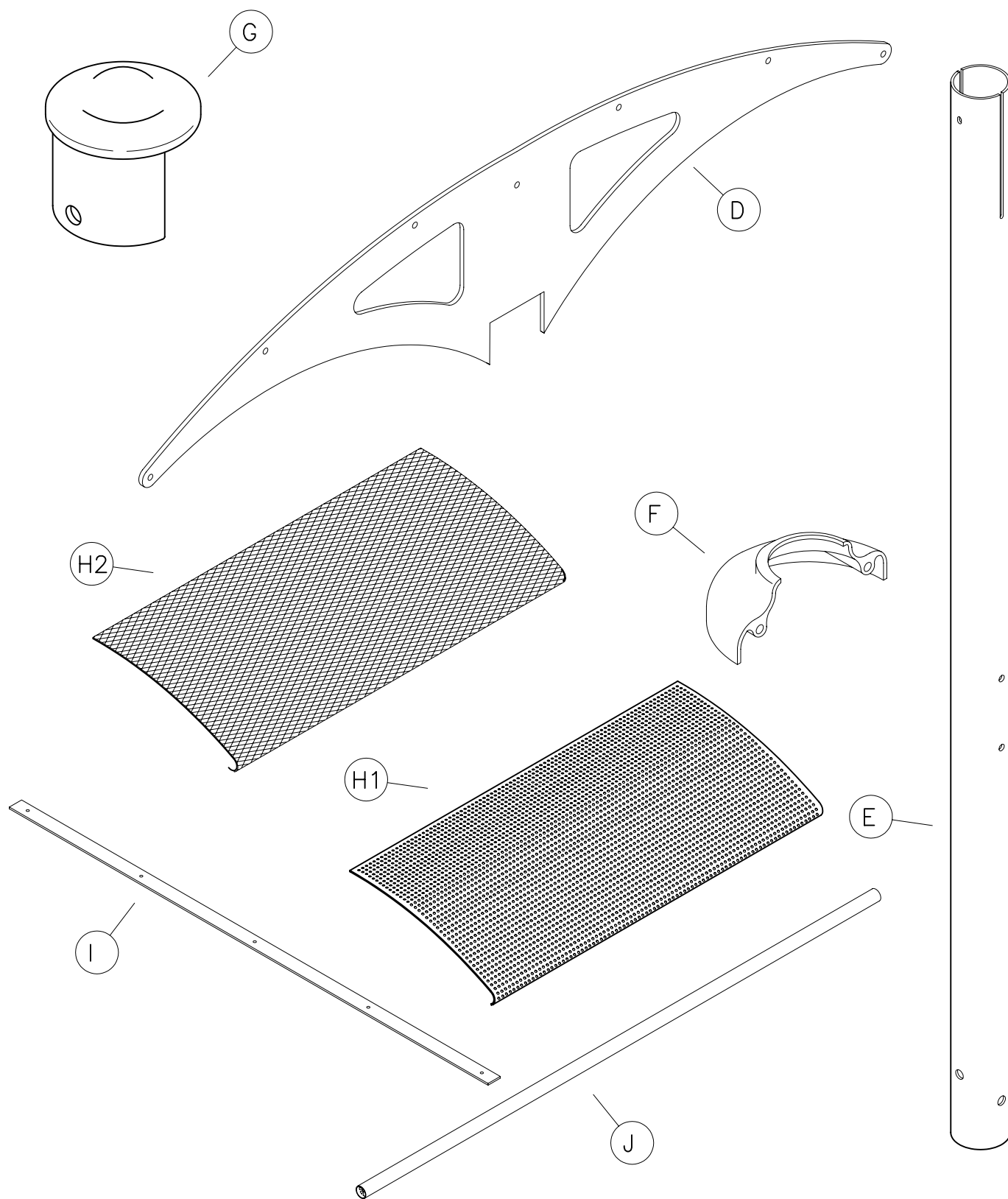
### ITEMS INCLUDED IN HARDWARE PACKAGE #:

ITEM	PART#	DESCRIPTION	21023 QTY	21031 QTY	21104 QTY	21108 QTY	21135 QTY	21136 QTY
AA	17032	5/16-18 HEX FINISH NUT - SS	4	0	5	0	12	0
BB	17028	3/8" FLAT WASHER - SS	8	36	22	0	24	0
CC	17025	5/16-18 x 1 1/2" MACHINE SCREW - SS	4	0	17	0	0	0
DD	17041	3/8-16 x 1 1/4" MACHINE SCREW - SS	0	6	0	0	0	0
EE	17019	3/8-16 HEX NUT - SS	0	18	0	0	0	0
FF	17013	3/8-16 x 1 1/4" HEX HEAD BOLT - SS	0	12	0	0	0	0
GG	17103	5/16" FLAT WASHER - SS	0	0	12	0	0	0
HH	17095	#12 X 1 1/2" #3 SELF TAPPING SCREW - SS	0	0	12	0	0	0
II	17072	1/2" FLAT WASHER - SS	0	0	4	0	0	0
JJ	17081	1/2-13 FLANGE NUT - SS	0	0	2	4	0	4
KK	17098	1/2-13 X 6 1/2" HEX HEAD BOLT - SS	0	0	2	4	0	4
LL	7179	SHELTER ROOF WASHER	0	0	5	0	0	0
MM	17096	5/8-11 X 1 1/2" HEX HEAD BOLT - SS	0	0	0	12	0	4
NN	17100	5/8-11 NUT - SS	0	0	0	12	0	4
OO	17069	5/8" LOCK WASHER - SS	0	0	0	12	0	4
PP	17097	5/8" FLAT WASHER - SS	0	0	0	12	0	4
RR	17086	1/2" LOCK WASHER - SS	0	0	0	4	0	4
SS	17052	1/4-20 X 1" MACHINE SCREW - SS	0	0	0	4	0	4
TT	17011	5/16-18 x 1 1/2" HEX HEAD BOLT - SS	0	0	0	0	12	0
UU	17050	5/16" SPLIT LOCK WASHER - SS	4	0	5	0	12	0
VV	17200	3/8" SPLIT LOCK WASHER - SS	0	18	0	0	0	0

### ASSEMBLY TOOLS REQUIRED

1 - REGULAR TIP SCREWDRIVER	2 - 15/16" WRENCHES	2 - 3/4" WRENCHES	2 - 9/16" WRENCHES
2 - 1/2" WRENCHES	1 - 5/16" WRENCH	1 - 3' OR 6' LEVEL	

# hardware identification:



ITEM	PART#	DESCRIPTION	QTY
D	7131	WING	2
E	7132	SHELTER UPRIGHT TUBE	2
F	7147	POST COVER W/HARDWARE	2 SETS
G	7148	POST CAP	2
H1	8053	ROOF PANEL PERFORATED	2
H2	8054	ROOF PANEL XM	2
I	8063	ROOF PANEL STRIP	1
J	7134	ROOF SUPPORT TUBE	6

## ASSEMBLY TOOLS REQUIRED

- 1 - REGULAR TIP SCREWDRIVER
- 2 - 1/2" WRENCHES
- 1 - 3' OR 6' LEVEL
- 1 - 3/4" WRENCH
- 1 - 5/16" WRENCH

## assembly procedures:

**IMPORTANT:** Assemblers should be reasonably skilled in the assembly of commercial grade/heavy duty fabricated steel equipment.

To ensure proper assembly, it is suggested that you take adequate time to locate and identify each part. To prevent scratching of the finished pieces, we recommend this unit to be assembled on a clean, flat, solid, surface with a drop cloth, allowing plenty of working room. **Also please read the instructions and study the sketches very carefully.** A little extra time spent before assembly will be well worth it in performing a complete, proper assembly. Please note that all parts have been pre-cut and pre-drilled.

During the assembly process leave all bolts and nuts "finger tight", until the entire unit is completely assembled. This allows room for movement to level or adjust all seats, tops, benches, framework and braces if necessary. **After final adjustment and leveling, permanently tighten all nuts, bolts and fasteners.**

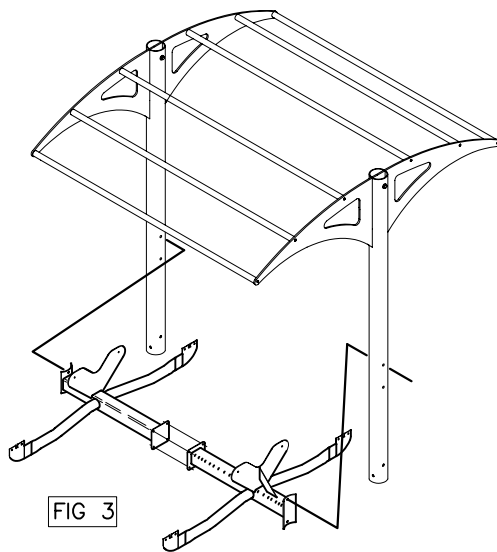
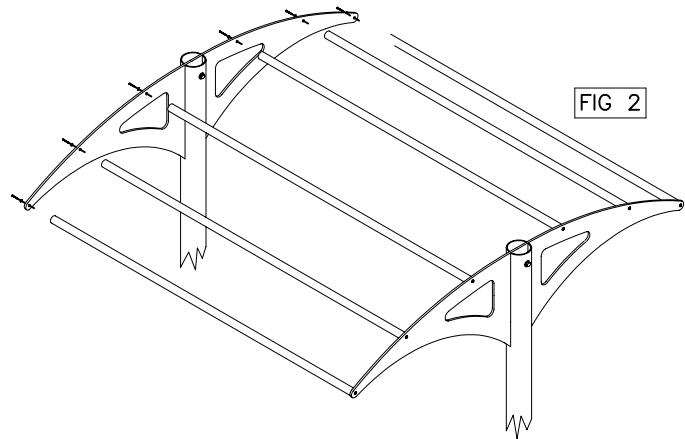
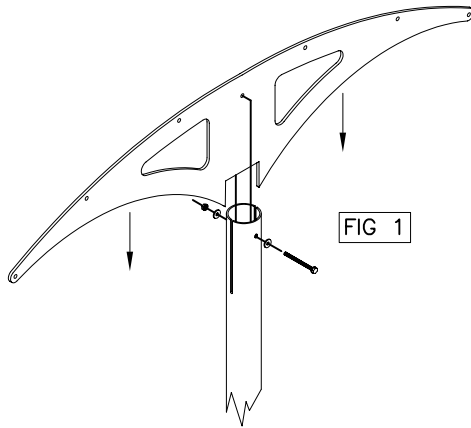
**WARNING: THIS UNIT IS HEAVY AND COMPLEX. DURING INSTALLATION MULTIPLE PERSONNEL AND/OR LIFTING EQUIPMENT IS NEEDED TO PREVENT INJURY.**

STEP 1: Locate and prepare the installation site by digging two holes 84" on center in accordance to your local building codes.

**NOTE:** This product has been engineered in accordance with the design load provisions of ASCE 7-98 and the design load provisions of the Florida Bldg. Code, 2001, for Miami-Dade County. To support the maximum wind/snow load conditions, the foundations for this product should be engineered on a site specific basis to be able to withstand the ultimate base reactions shown on page 8.

STEP 2: Insert wing (D) into the slot of upright tube (E), temporarily bolt the wing and upright tube together using (KK) hex head bolt, two (II) flat washers, and one (JJ) hex nut. (SEE FIG. 1) Repeat for the other upright and wing. **NOTE: EXPOSE THE HEAD OF THE HEX BOLT TO THE OUTSIDE.**

STEP 3: Bolt each roof support tube (J) to each wing using one (BB) flat washer and one (CC) machine screw per each tube (SEE FIG 2).



STEP 4: Bolt both furniture mounting brackets (B-) together using one (MM) hex head bolt, one (OO) lock washer, one (PP) flat washer, and one (NN) hex nut per each hole

STEP 5: Position furniture mounting frame (B-) so mounting holes on mounting plate line up with holes in post. Secure with one (KK), one (RR) and one (JJ) per hole. Insert bolt through post and then through mounting plate. (RR) goes under head of (KK) with (JJ) on mounting plate.

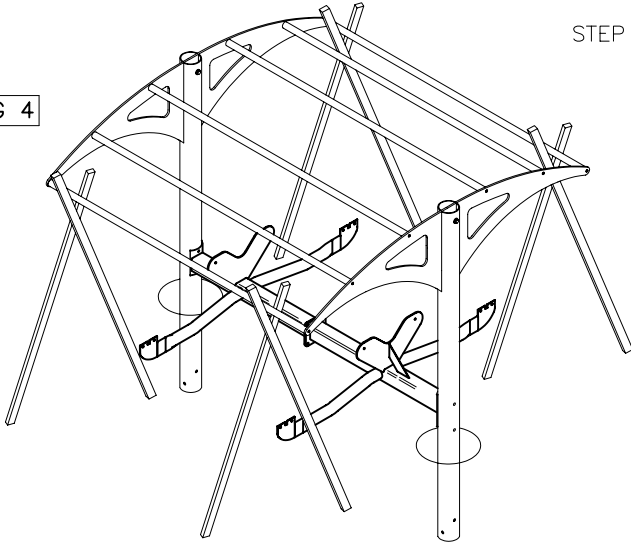
## installation:

**WARNING:** The proper installation for Wabash Valley products may depend upon many factors unique to the site, location, or use of a particular product. Consult with your contractor or other professional to determine your specific installation requirements.

## assembly procedures continued:

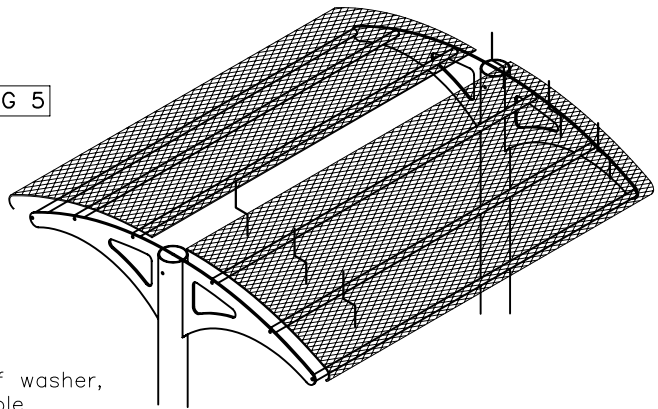
STEP 6: Carefully place each upright tube in each hole, ensure that each upright tube is vertical and parallel to each other. The roof support tubes should be horizontal also, it may be necessary to brace the shelter to maintain these adjustments (SEE FIG 4). Mix the concrete to the manufacture's instructions and fill the holes. Make sure that the concrete flows into the four holes at the bottom of each upright tube. Allow to cure according to concrete manufacture's instructions.

FIG 4



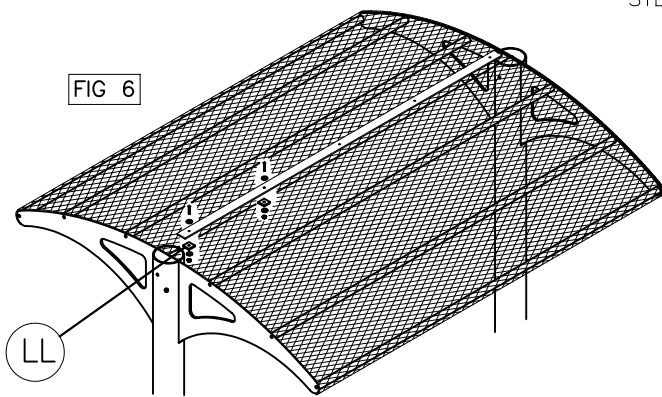
STEP 7: Lift both roof panels (H-) one at a time on the the roof support tubes and clamp in place. Nylon locking straps may also be used. The roof panels should be flush with the ends. Arc joint pliers may need to be used to pull the two panels towards each other. Once all adjustments have been made, drill a small 1/8" pilot hole through the roof panel and into the roof support tubes approximately 12" from the edge of the wing. Use one (HH) self tapping screw and one (GG) flat washer per each pilot hole (SEE FIG 5).

FIG 5



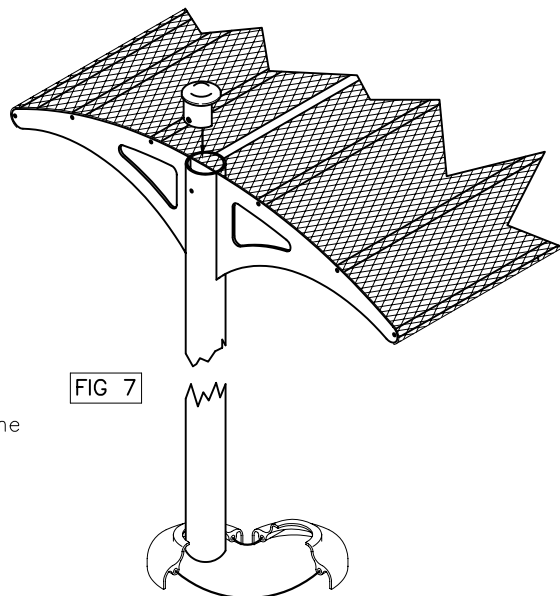
STEP 8: Place the roof panel strip (I) on the seam between each roof panel and bolt through it using one (CC) machine screw, two (BB) flat washers, one (LL) roof washer, one (VV) lock washer and one (AA) nut per each hole in the roof strip. NOTE: THE (LL) ROOF WASHER GOES TO THE UNDERSIDE OF THE ROOF PANELS (SEE FIG 6).

FIG 6



STEP 9: With the roof panels and roof strip fully installed, carefully remove the (KK) hex head bolt installed in STEP 1. Place the (G) post cap and reinstall the (KK) bolt through the upright post and cap. Tighten the bolt with appropriate tools at this time, repeat for the other upright tube (SEE FIG 7).

FIG 7

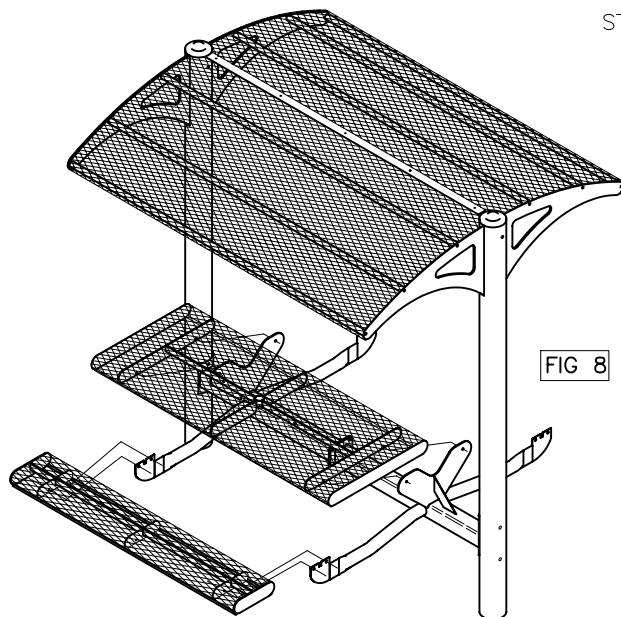


STEP 10: Install the split bell covers (F) using two (SS) machine screws, supplied with covers, per each post.

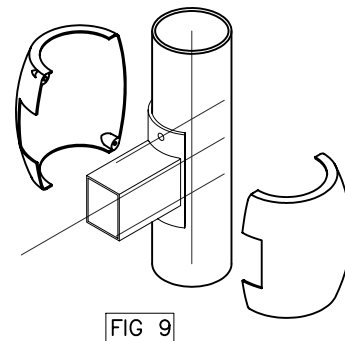
## product assembly continued:

STEP 11: Mount the table top (C-) and/or seats (C-) to the corresponding furniture mounting brackets using one (TT) hex head bolt, two (BB) flat washers, one (UU) lock washer and one (AA) flange nut per each hole (SEE FIG. 8). NOTE: WHEN BOLTING CITY LIMIT SEATS TO FURNITURE MOUNTING BRACKETS USE ONE (DD) FOR THE EXTERIOR HOLES AND ONE (FF) FOR THE INTERIOR HOLES, ONE (EE), AND TWO (BB) AND ONE (VV) PER EACH HOLE

STEP 12: Level the furniture and tighten using the appropriate tools.



STEP 13: Install the bolt covers using two machine screws (SS) per each post, (SEE FIG 9).



## product specifications:

### CAPS & COVERS:

The caps, split covers and bolt covers consist of #2 or 319 cast aluminum.

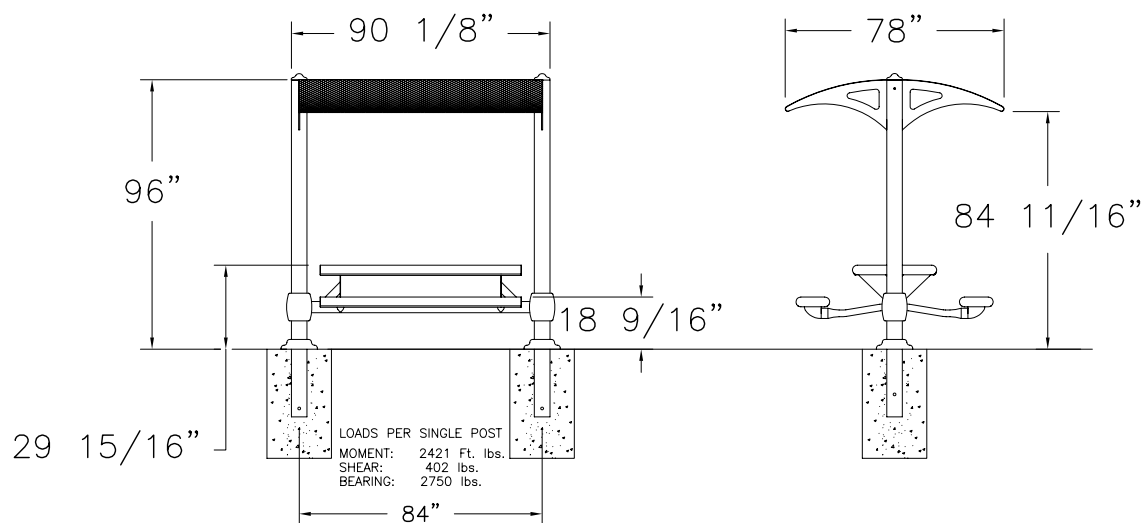
### GENERAL:

SH105D/SH105P – The ground space requirements are 78" wide, 92 1/8" long and 98 1/4" tall. The top of the table is 29 15/16" and 18 9/16" to the top of the seat.

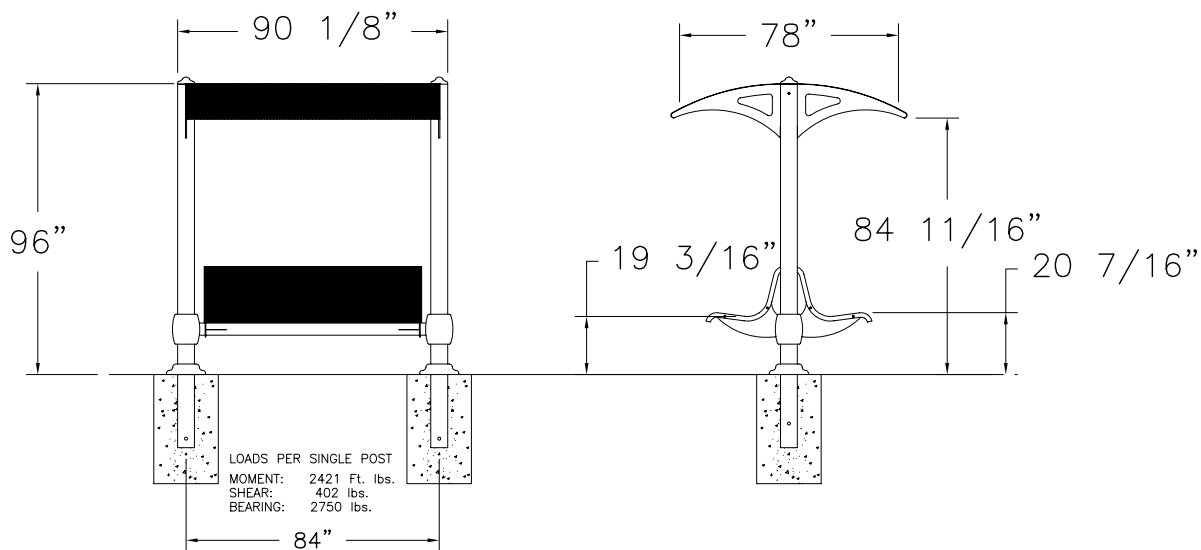
SH300D/SH300P/SH400D/SH400P – The ground space requirements are 78" wide, 92 1/8" long and 98 1/4" tall. It is 20 3/8" from the ground to the front edge of the seat and 19 3/16" from the ground to the lowest part of the seat.

SH305D/SH305P/SH405D/SH405P – The ground space requirements are 78" wide, 92 1/8" long and 98 1/4" tall. It is 20 7/16" from the ground to the front edge of the seat and 19 3/16" from the ground to the lowest part of the seat.

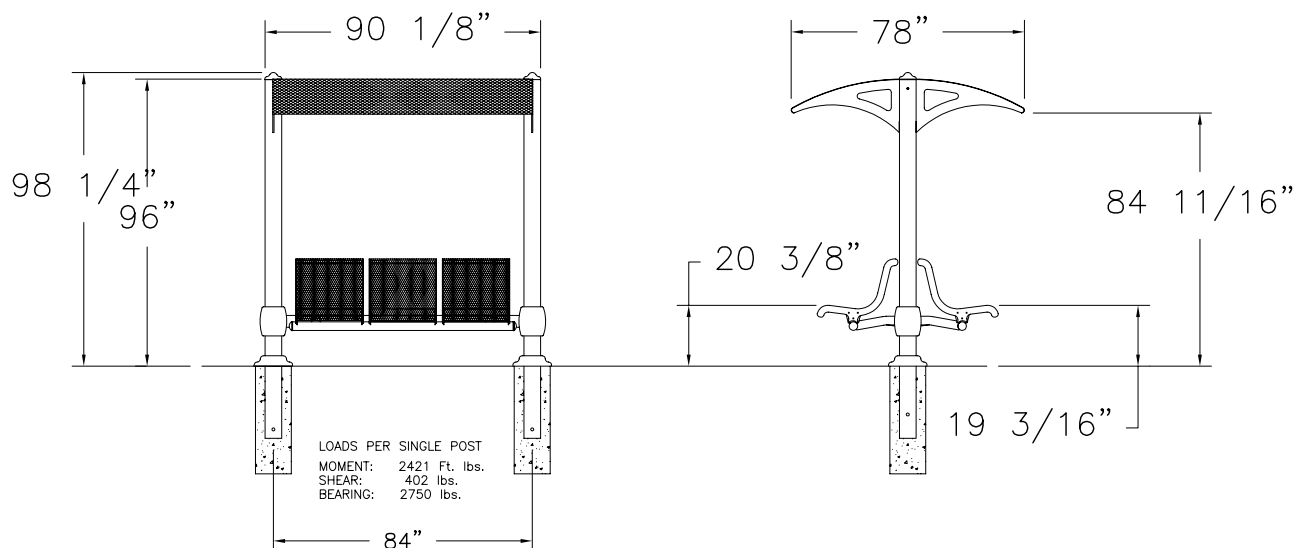
*product dimensions continued:*



SH105D/SH105P



SH305D/SH305P/SH405D/SH405P



SH300D/SH300P/SH400D/SH400P