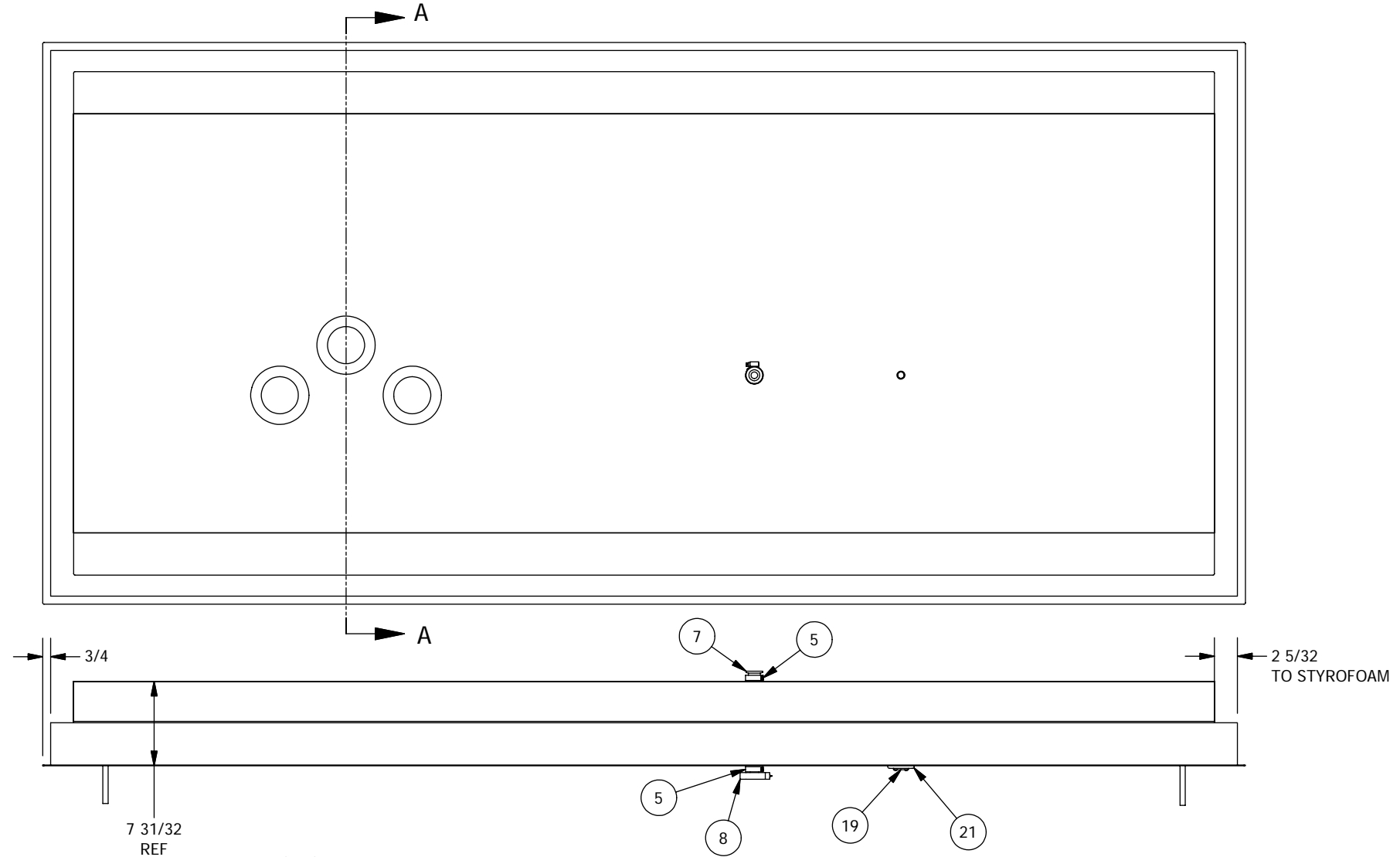
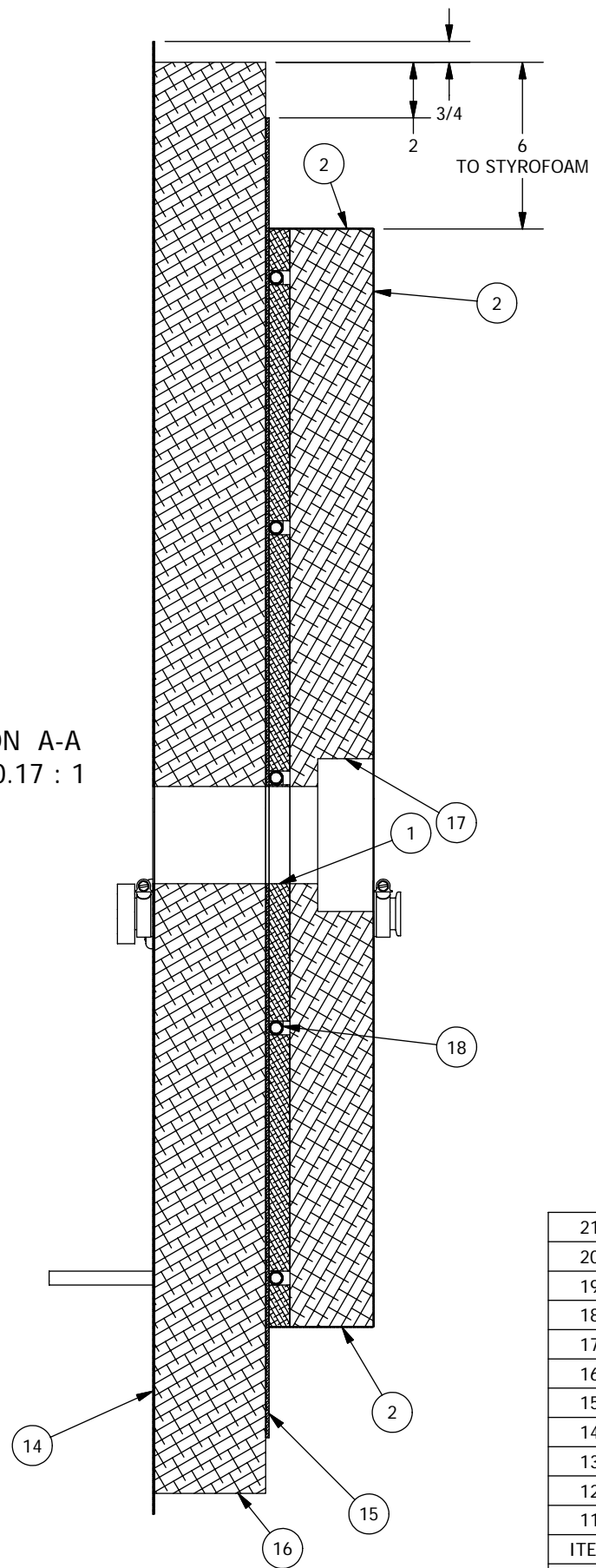


SECTION A-A
SCALE 0.17 : 1



NOTES

1. Use riveted copper pipe straps to hold pipe to heat sink. Apply Devcon metal-filled epoxy or putty along edge of interface between pipe and aluminum sheet.
2. Use Liquid Nails construction adhesive to cement all metal sheets and styrofoam together.
3. Use contact adhesive to cement formica to Styrofoam, or Liquid Nails if necessary.
4. Dry fit all parts before using adhesive.
5. Rivets and pipe straps not shown

ITEM	QTY	DESCRIPTION	PART NUMBER	ITEM	QTY	DESCRIPTION	PART NUMBER
21	1	Vacuum Valve Access Mount	PFS03034				
20	1	Vacuum Valve Access Plug 1	PFS03032	10	100	Aluminum blind rivet, 1/8", 3/16" grip	-
19	1	Vacuum Valve Access Cap	PFS03031	9	1	Nor-Cal NW Centering Ring NW-25-CR-SV	-
18	1	Insulation Side Water Jacket	PFS03027	8	1	Nor-Cal NW 25 Nut Clamp	-
17	1	Insulation Side 3" Foam	PFS03023	7	3	Nor-Cal NW Full Nipple 2N-NW-25B	-
16	1	Insulation Side 4" Foam	PFS03020	6	1	Vacuum Hose, rubber	-
15	1	Insulation Side 2 Heat Sink	PFS03008	5	2	Stainless Worm Drive Hose Clamp, Ø1.625	-
14	1	Insulation Side 2 Outer Plate	PFS03007	4	4	1/8 X .313 Std Pop Rivet	-
13	1	Liquid Nails construction adhesive	-	3	2	Button Head, Hex, 8-32 UNC x 0.375	-
12	1	Devcon metal-filled epoxy #19770	-	2	5	Formica, black	-
11	50	Copper pipe strap MSC# 36892123	-	1	1	Styrofoam 3/4" Layer	-
Bill of Material				Bill of Material			

**THE OBSERVATORIES
OF THE CARNEGIE INSTITUTION OF WASHINGTON**
813 Santa Barbara Street
Pasadena, CA 91101

MATERIAL

EST WEIGHT
157 lb

SCALE
1:14

DWN CRANE 10/5/2007

APVD BY DATE

UNLESS OTHERWISE SPECIFIED
FRACTIONAL .XX +/- 0.01 +/- 0.1 DEG
DECIMAL .XXX +/- 0.002 GOAL
ANGULAR .XXX +/- 0.005 REQD
BREAK SHARP EDGES MACHINED SURFACES 125 ✓
ALL DIMENSIONS IN INCHES

**P lanet
F nder
S pectrograph**

**Insulation Side 2
Assembly**

SHEET B DRAWING NUMBER PFS00029 SHT 1 OF 1 REV