

ITEM	QTY	DESCRIPTION	PART NUMBER	ITEM	QTY	DESCRIPTION	PART NUMBER	ITEM	QTY	DESCRIPTION	PART NUMBER
19	1	Styrofoam 3/4" Layer	-								
18	1	Formica, black	-								
17	2	Formica, black	-	12	1	Sleeve-Lok MCM6536K39	-				
16	2	Formica, black	-	11	2	Swage-Lok Elbow 1/2" to 1/4 NPT	-	7.4	2	Washer, ANSI A, Normal #6	-
15	2	1/4 NPT Ball Valve	-	10.5	2	Threaded Rod MCM98743A230	-	7.3	2	Hex Nut 6-32	-
14.7	2	Threaded Rod MCM98743A230	-	10.4	4	Washer, ANSI A, Normal 0.25	-	7.2	1	Tube Stiffener Clamp Anchor	PFS03043
14.6	4	Washer, ANSI A, Normal 0.25	-	10.3	4	Hex nut 1/4-20	-	7.1	1	Tube Stiffener Clamp	PFS03044
14.5	4	Hex nut 1/4-20	-	10.2	12	1/8 X .313 Std Pop Rivet	-	7	2	Pipe Strain Protector	-
14.4	12	1/8 X .313 Std Pop Rivet	-	10.1	1	Insulation Handle Attachment Plate	PFS03035	6	1	Insulation Side 1 Outer Sheet	PFS03005
14.3	1	Pull Handle MCM1402A11	-	10	4	Handle Assembly	-	5	1	Insulation Side 1 Heat Sink	PFS03006
14.2	6	FHMS, Phillips, 8-32 UNC x 3/8 in	-	9	8	1/8 X .375 Std Pop Rivet	-	4	1	Insulation Side 4" Foam	PFS03020
14.1	1	Insulation Handle Attachment Plate	PFS03035	8	4	Collar 1/2" two-piece - MCM6436K14	-	3	1	Insulation Side 3" Foam	PFS03023
14	4	Handle Assembly	-	7.6	2	SHCS 6-32 UNCx1	-	2	1	Insulation Side Water Jacket	PFS03027
13	2	Quick Disconnect Coupling MCM1077T17	-	7.5	2	SHCS 6-32 UNCx0.5	-	1	2	Tube Stiffener Base Plate	PFS03042

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

UNLESS OTHERWISE SPECIFIED
 FRACTIONAL DECIMAL ANGULAR
 +/- 1/32 .XX +/- 0.01 +/- 0.1 DEG
 .XXX +/- 0.002 GOAL
 .XXX +/- 0.005 REQD
 BREAK SHARP EDGES MACHINED SURFACES 125

EST WEIGHT 170 lb

SCALE 1:10

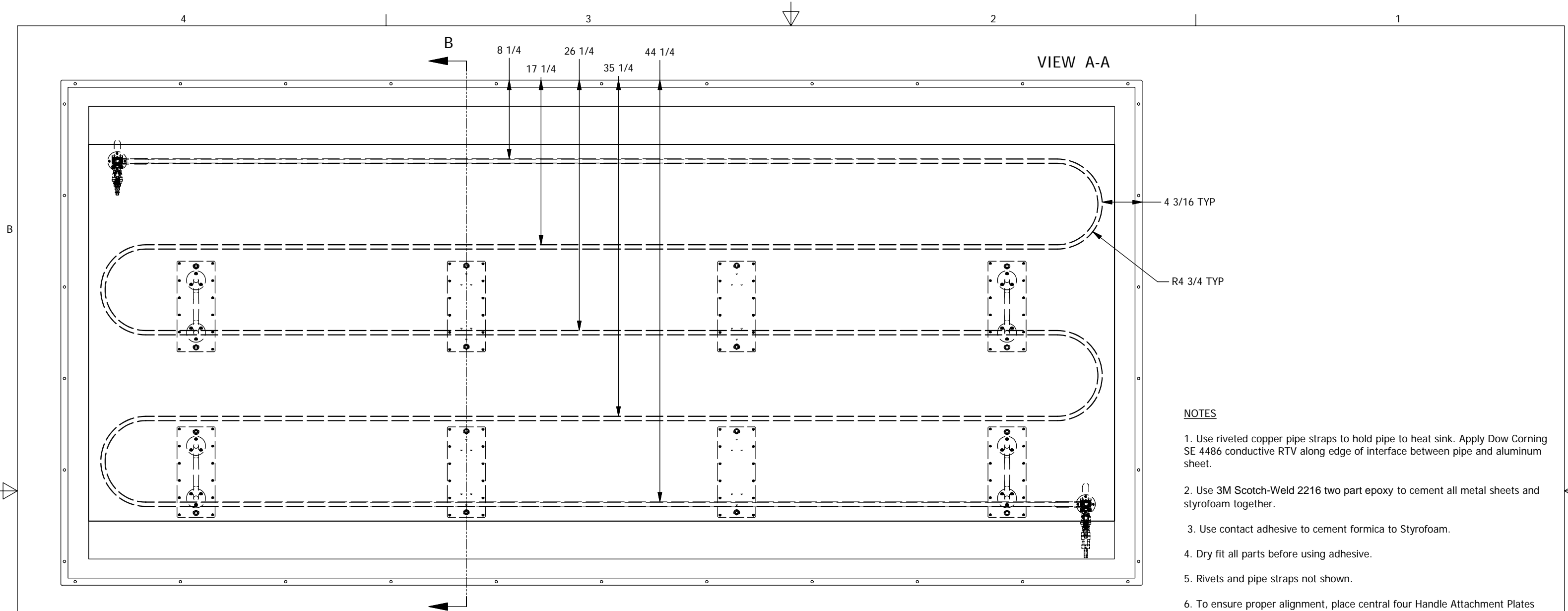
Planet
Finder
Spectrograph

**Insulation Side 1
Assembly**

DWN CRANE 5/20/2009

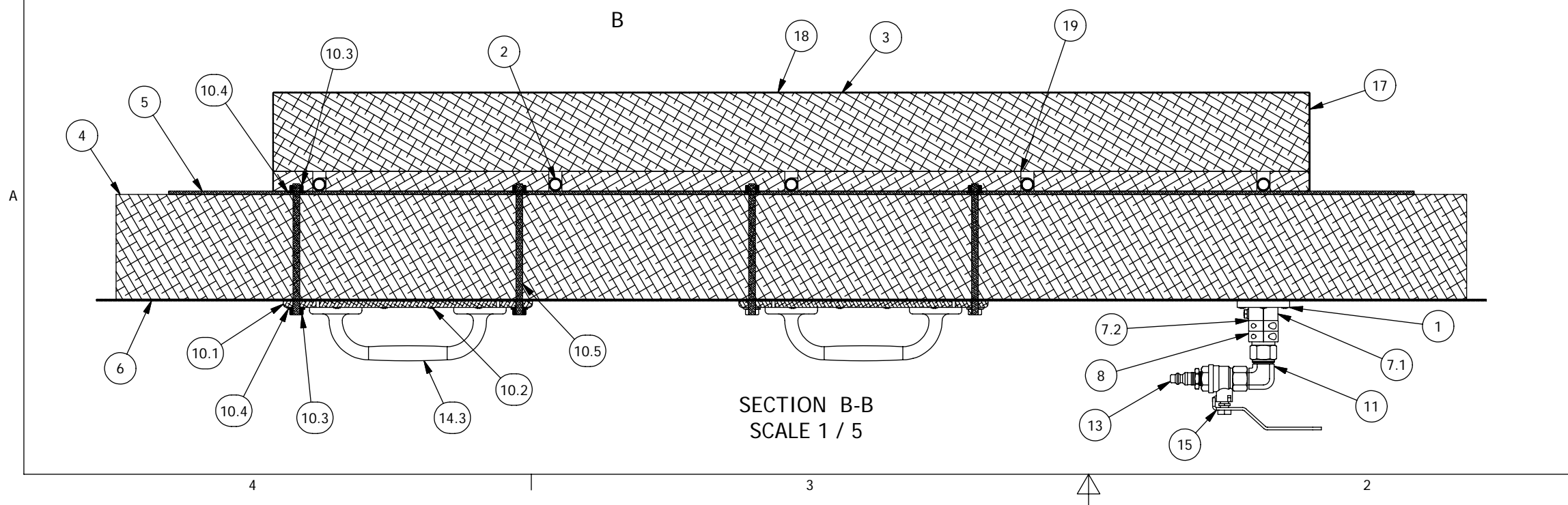
APVD BY DATE

SHEET B DRAWING NUMBER PFS00028 SHT 1 OF 2 REV 1



NOTES

1. Use riveted copper pipe straps to hold pipe to heat sink. Apply Dow Corning SE 4486 conductive RTV along edge of interface between pipe and aluminum sheet.
2. Use 3M Scotch-Weld 2216 two part epoxy to cement all metal sheets and styrofoam together.
3. Use contact adhesive to cement formica to Styrofoam.
4. Dry fit all parts before using adhesive.
5. Rivets and pipe straps not shown.
6. To ensure proper alignment, place central four Handle Attachment Plates while attached to Lifting Frame Assembly PFS00034 and rivet in place.



SECTION B-B
SCALE 1 / 5

THE OBSERVATORIES OF THE CARNEGIE INSTITUTION OF WASHINGTON 813 Santa Barbara Street Pasadena, CA 91101				
MATERIAL		UNLESS OTHERWISE SPECIFIED FRACTIONAL DECIMAL ANGULAR +/- 1/32 .XX +/- 0.01 +/- 0.1 DEG		
EST WEIGHT		.XXX +/- 0.002 GOAL .XXX +/- 0.005 REOD BREAK SHARP EDGES MACHINED SURFACES 125 ✓ ALL DIMENSIONS IN INCHES		
SCALE		1:10		P lanet F nder S pectrograph
DWN	CRANE	5/20/2009		
APVD	BY	DATE	SHEET	REV
			B	1
			DRAWING NUMBER	SHT 2
			PFS00028	OF 2