

**Positions of IR2 Flanges and Magnets as Measured During January 2005 Campaigns**

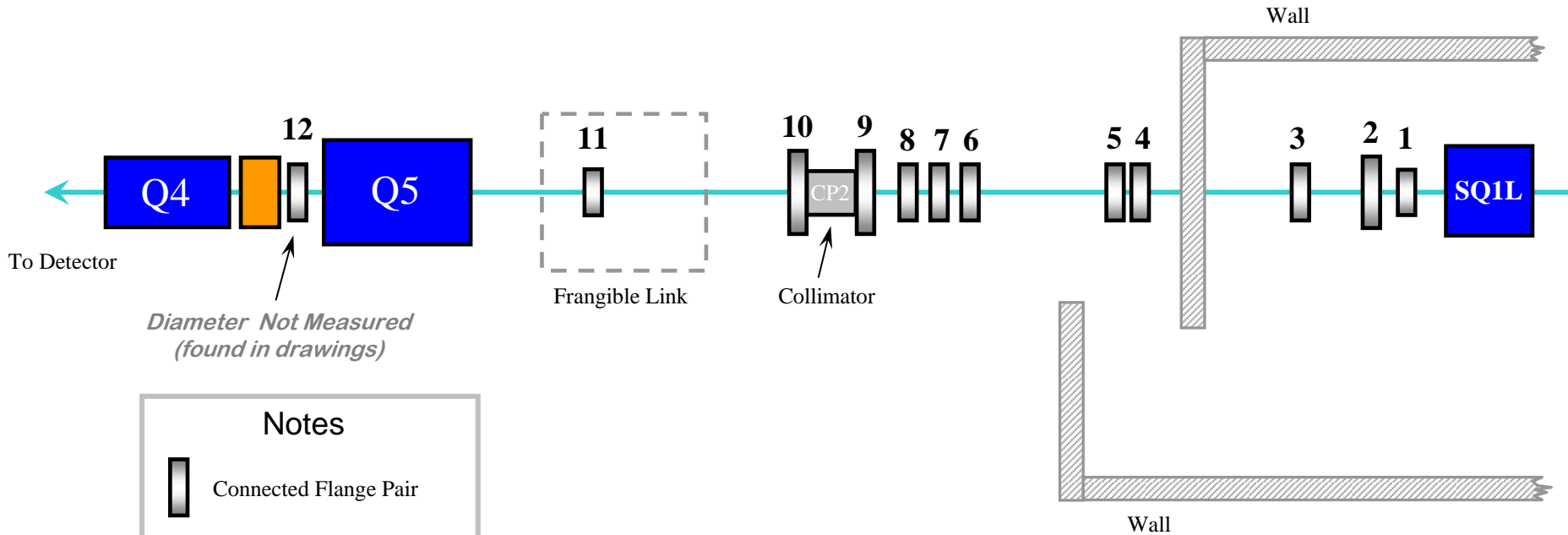
	As-Built				PEP II System			IR System		
	Z (in)	DX (in)	DY (in)	Dia. (in)	Z (m)	X (m)	Y (m)	Z (m)	X (m)	Y (m)
<b>BH2ASQBM</b>	0.106	0.019	0.118		50282.72661	70188.40149	2065.99806	-21.7972	-0.0104	0.0030
<b>Flange01</b>	13.800	-0.065	0.023	7.980	50282.89930	70188.09960	2065.99560	-21.4494	-0.0117	0.0006
<b>Flange02</b>	35.450	-0.742	0.051	9.980	50283.16030	70187.61520	2065.99640	-20.8994	-0.0279	0.0014
<b>Flange03</b>	149.050	-0.493	0.097	9.980	50284.61350	70185.12240	2065.99750	-18.0140	-0.0158	0.0025
<b>Flange04</b>		-0.167	0.052	9.980	50286.05790	70182.64870	2065.99640	-15.1495	-0.0018	0.0014
<b>Flange05</b>		-0.176	0.025	9.980	50286.16460	70182.46420	2065.99570	-14.9363	-0.0016	0.0007
<b>Flange06</b>			0.010	9.980	50287.59640	70180.00440	2065.99530	-12.0902	0.0085	0.0003
<b>Flange07</b>										
<b>Flange08</b>	396.272				50287.77490	70179.69680	2065.99510	-11.7345	0.0093	0.0001
<b>Flange09</b>	411.542	0.523	0.035	16.50	50287.98100	70179.36800	2065.99590	-11.3467	0.0233	0.0009
<b>Flange10</b>	459.062		-0.016	16.50	50288.57500	70178.31720	2065.99470	-10.1397	0.0124	-0.0003
<b>Flange11</b>	554.732		0.067	7.516	50289.79420	70176.21520	2065.99680	-7.7097	0.0172	0.0018
<b>BH2AQU5M</b>	0.096	0.015	0.032		50290.30197	70175.34057	2065.99583	-6.6984	0.0196	0.0008
<b>Flange12</b>	633.452		4.945	9.980	50290.79740	70174.48560	2065.99395	-5.7103	0.0212	-0.0011
<b>BH2AQU4M</b>	0.081	-0.015	0.011		50291.44248	70173.40138	2065.99729	-4.4488	0.0378	0.0023
<b>BH2AIP1M</b>					50293.63416	70169.52976	2065.99502			
<b>BH2BQU4M</b>	0.155	0.081	0.020		50295.83036	70165.65383	2065.99852	4.4548	-0.0360	0.0035
<b>Flange08</b>		-0.282	0.039	9.980	50296.48710	70164.53170	2065.99610	5.7549	-0.0283	0.0011
<b>BH2BQU5M</b>	0.176	0.071	0.015		50296.97170	70163.71407	2065.99540	6.7053	-0.0175	0.0004
<b>Flange07</b>	-529.150	-0.915	-0.350	16.500	50297.78000	70162.27060	2065.98620	8.3595	-0.0392	-0.0088
<b>Flange06</b>	-517.000			16.500	50297.95490	70162.01530	2065.99510	8.6681	-0.0154	0.0001
<b>Flange05</b>	-505.000	-0.939	-0.336	16.500	50298.08720	70161.73970	2065.98650	8.9729	-0.0386	-0.0085
<b>Flange04</b>	-265.250	-0.749	-0.064	16.500	50301.14670	70156.47440	2065.99340	15.0625	-0.0216	-0.0016
<b>Flange03</b>	-24.300	0.165	0.131	7.980	50304.23740	70151.19190	2065.99840	21.1827	0.0137	0.0034
<b>Flange02</b>	-20.250	0.155	0.146	7.980	50304.28880	70151.10280	2065.99880	21.2855	0.0137	0.0038
<b>Flange01</b>	-13.550	0.227	0.129	7.980	50304.37580	70150.95650	2065.99830	21.4557	0.0159	0.0033
<b>BH2BSQBM</b>	0.115	0.073	0.131		50304.54655	70150.65432	2065.99838	21.8028	0.0127	0.0034

Level of Accuracy Indicated by Color Coding:  
 AEG 01/31/05 updated 02/04/05 with diameter of flange12

0.1 mm    1 mm    10 mm

# PEPII HER Flange Numbering for Location Survey

2A Side



*Diameter Not Measured  
(found in drawings)*

## Notes



Connected Flange Pair

- Drawing is **Not To Scale**
- Survey completed 1/19/05
- Collimator survey 2/2/05

## Summary of Measurements for Collimator BH2ACP2

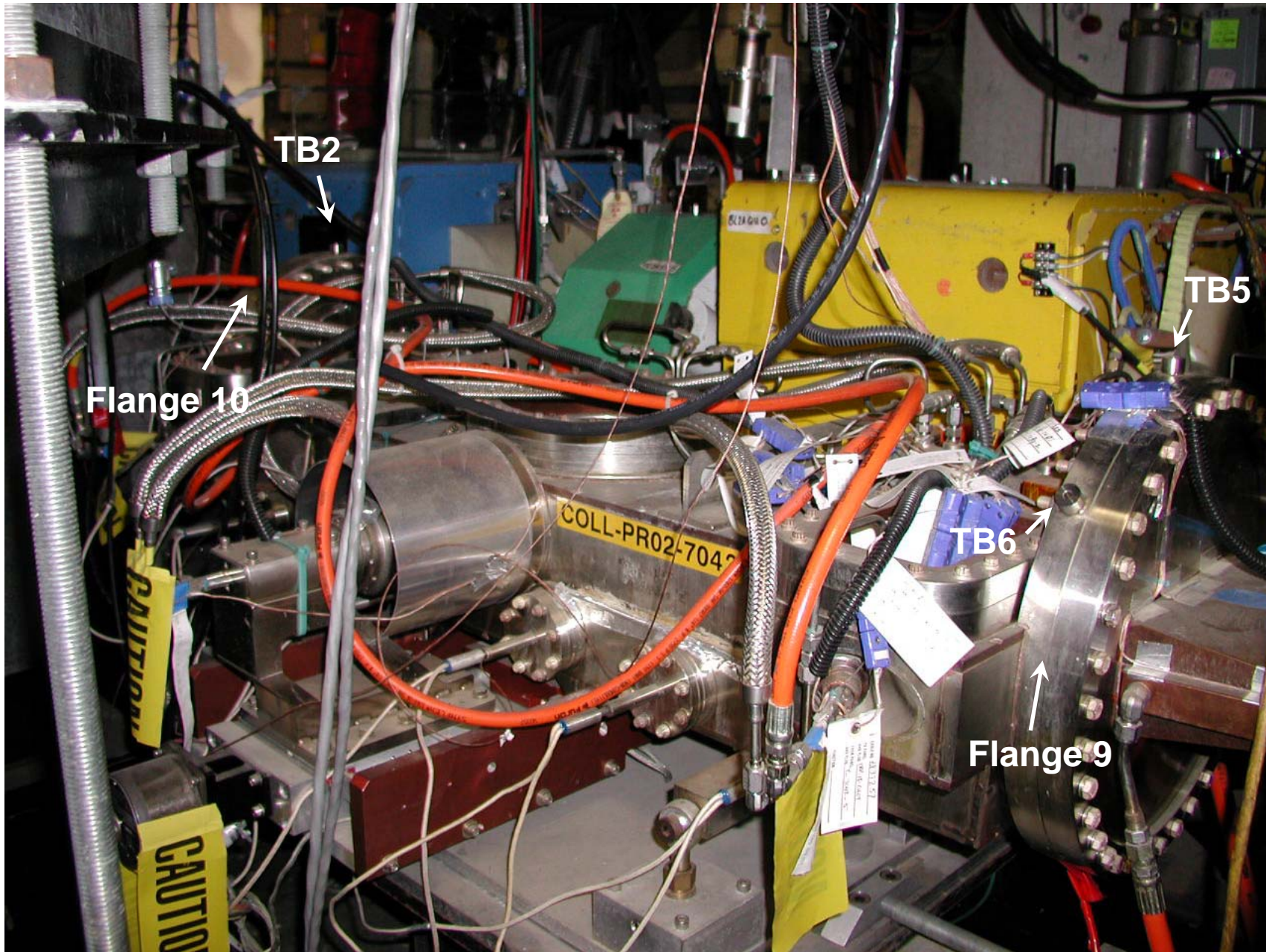
	Measured Features			Corrected As Built			IR System		
	Z (in)	X (in)	Y (in)	X (in)	Y (in)	Z (m)	X (m)	Y (m)	
Flange09 (top)	410.831	0.438	9.035	0.523	0.035	-11.347	0.023	0.001	
Flange09 (side)	409.663	24.773	0.315						
BH2ACP25	-0.05	-0.018	0.036	0.546	0.042	-11.347	0.024	0.001	
BH2ACP26	-0.07	-0.008	0.048						
<b>Flange09 final</b>						<b>-11.347</b>	<b>0.024</b>	<b>0.001</b>	
Flange10 (top)	459.942	0.699	8.984		-0.016	-10.140	0.012	0.000	
BH2ACP22	-0.04	0.051	-0.016	0.610	-0.016	-10.140	0.028	0.000	
<b>Flange10 final</b>						<b>-10.140</b>	<b>0.028</b>	<b>0.000</b>	

Fiducialization values for the collimator BH2ACP2 can be found at:

[http://www-group.slac.stanford.edu/met/Align/Job\\_List/Scans/Pep%202/As%20Built/High%20Energy/Region2A/](http://www-group.slac.stanford.edu/met/Align/Job_List/Scans/Pep%202/As%20Built/High%20Energy/Region2A/)

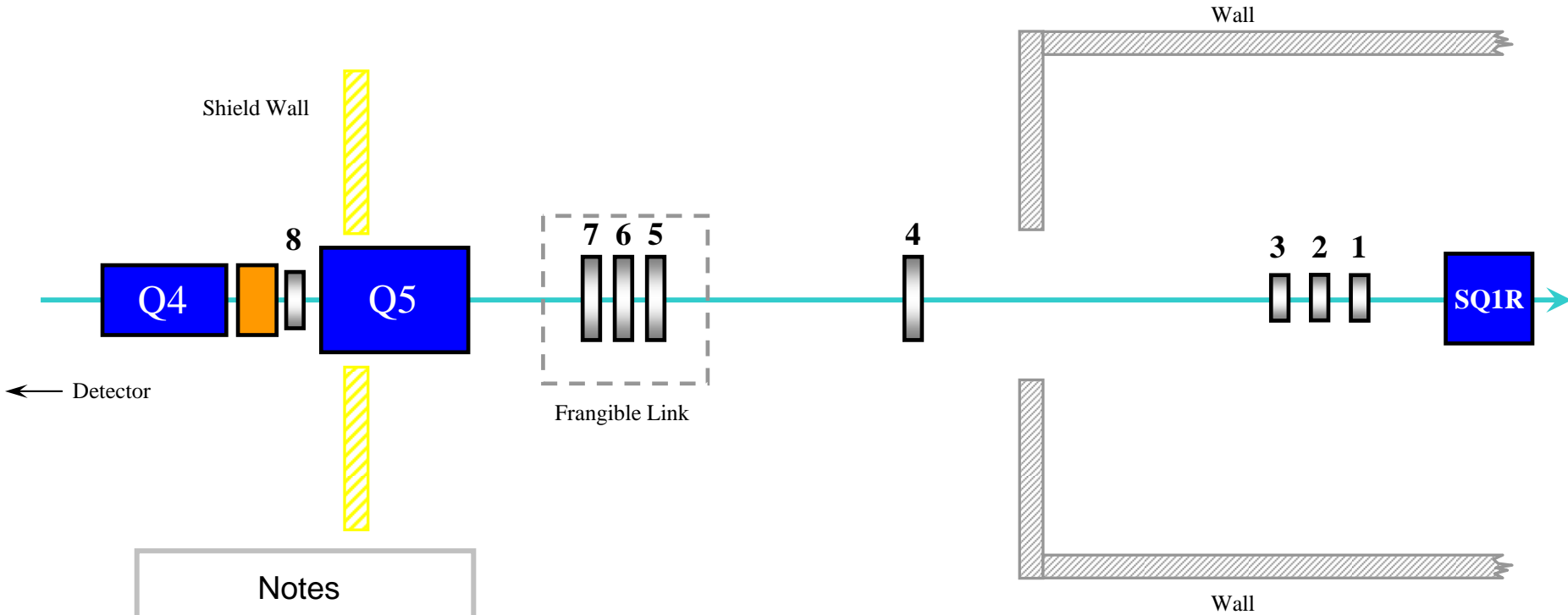
In the AEG files, this collimator was offset in X by 0.559 in. This number is part of the measured values and eliminated in the “Corrected As Built” as well as in the IR System coordinates.

With this, both the flange and the TB values refer to the same collimator datum as defined by the CMM measurements.



# PEPII HER Flange Numbering for Location Survey

2B Side



## Notes



Connected Flange Pair

- Drawing is **Not To Scale**
- Survey completed 1/21/05