



1. FM Floor inspection (평화도, 평탄도)

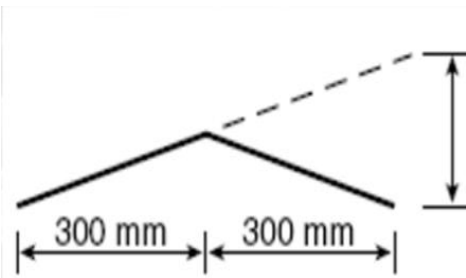
Survey Method

1 – Property F (Flatness 평탄도)

Property F (FF)는 그림과 같이 300mm 간격의 연속적인 3개 점의 높이를 측정합니다.

첫 번째 점과 두 번째 점을 연결한 직선을 연장하여 세 번째 점과의 수직거리가 Property F 로 정의됩니다.

Property F 는 세 개의 점의 높이 차이를 그림과 같은 방법으로 측정하게 됩니다.

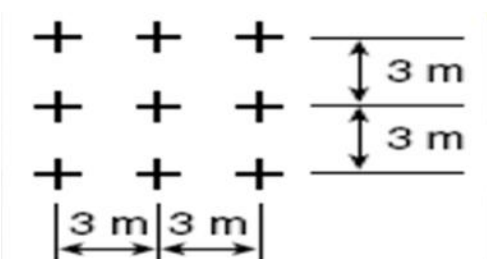


2 – Property E (Levelness 수평도)

Property E (FL)는 한 지점과 3M 간격으로 측정합니다.

Property E 측정은 그림과 같이 바닥에 3M 간격으로 가이드를 표시하고 각 위치의 레벨 값을 측정합니다.

이때 벽과 기둥 같은 설치된 구조물 그리고 방해물로부터 1.5M를 띄우고 측정합니다.



Summary Survey Result

Specification Standard – TR34 4th Edition FM2

Property E

Summary Survey Result				
층	SLAB AREA	TR34 4th Edition FM2 Property E		PASS / FAIL
	ID	Measure (95%) Over $\pm 6.5\text{mm}$	Measure (100%) Over $\pm 15.0\text{mm}$	
5F	#1	3.88%	0.00%	PASS
	#2	4.85%	0.00%	PASS

Property F

Summary Survey Result				
층	SLAB AREA	TR34 4th Edition FM2 Property F		PASS / FAIL
	ID	Measure (95%) Over $\pm 2.0\text{mm}$	Measure (100%) Over $\pm 15.0\text{mm}$	
5F	#1	3.42%	0.00%	PASS
	#2	4.21%	0.00%	PASS

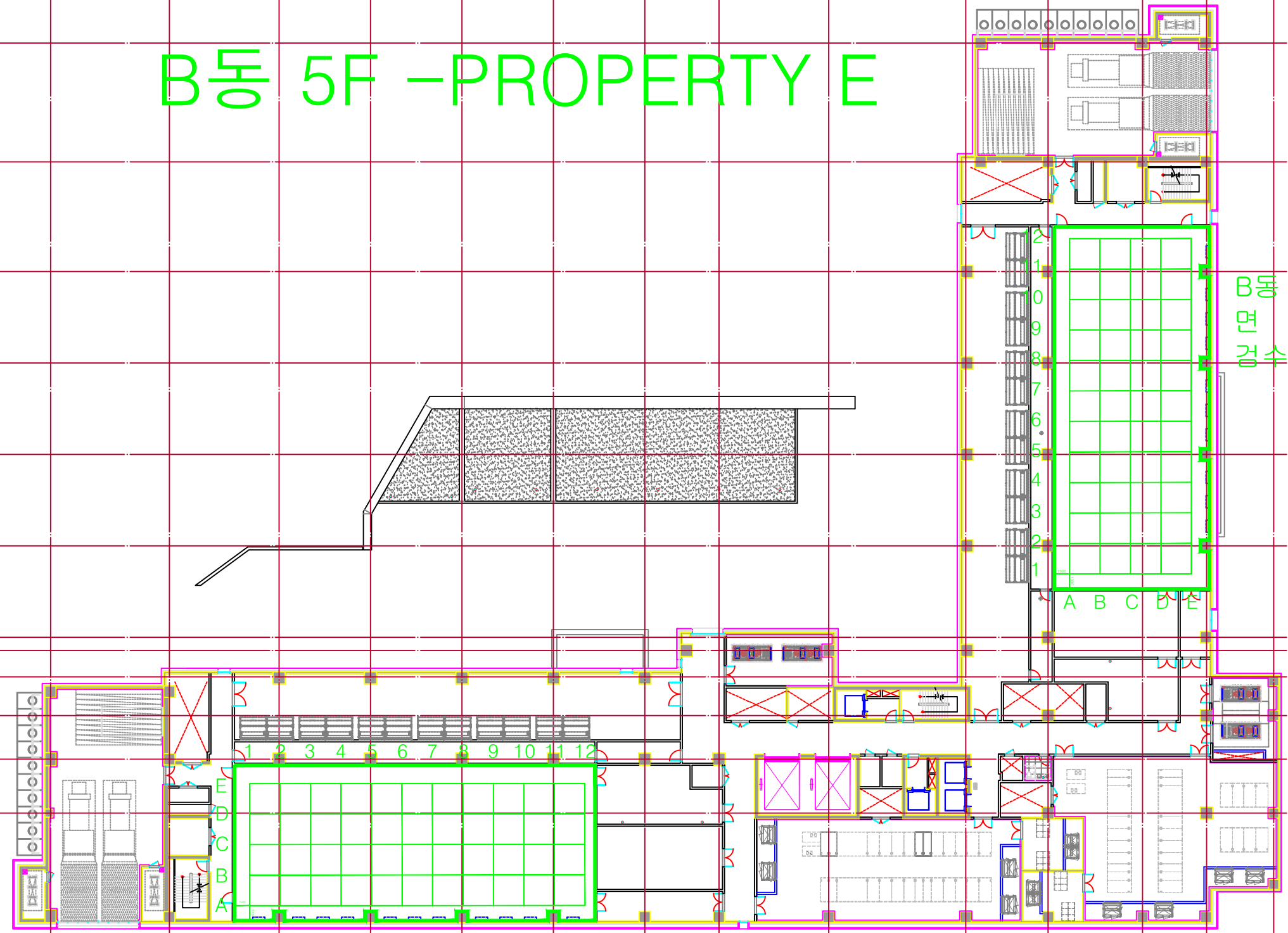
1 2 3 4 5 6 7 8 9 10 11 11A 12 13
120,400

11,700 10,800 9,000 9,000 9,000 9,000 7,300 10,800 13,500 8,100 9,300 6,300 6,600

K
J
H
G
F
E
D
C2
C1
C
B1
B
A

11,700
10,800
9,000
9,000
9,000
9,000
9,000
1,300
3,800
4,300
5,300
10,300

B동 5F - PROPERTY E



B동 5F #1
면 적 : 541m2
검수날짜 : 25.11.10

B동 5F #2
면 적 : 539m2
검수날짜 : 25.11.10

	E		D		C		B		A	
1	570.9	(1.2)	572.1	0.4	571.7	3.6	568.1	(5.2)	573.3	1
	(1.7)		1.8		2.7		(1.9)		(1.7)	
2	572.6	2.3	570.3	1.3	569	(1.0)	570	(5.0)	575	2
	(1.7)		(0.9)		(2.3)		0.9		6.6	
3	574.3	3.1	571.2	(0.1)	571.3	2.2	569.1	0.7	568.4	3
	7.3		1.8		0.8		(0.3)		(0.3)	
4	567	(2.4)	569.4	(1.1)	570.5	1.1	569.4	0.7	568.7	4
	(5.5)		2.8		(0.9)		(2.5)		(1.7)	
5	572.5	5.9	566.6	(4.8)	571.4	(0.5)	571.9	1.5	570.4	5
	2.4		(3.0)		1.7		4.1		(3.9)	
6	570.1	0.5	569.6	(0.1)	569.7	1.9	567.8	(6.5)	574.3	6
	(3.9)		2.1		3.7		1.4		0.2	
7	574	6.5	567.5	1.5	566	(0.4)	566.4	(7.7)	574.1	7
	0.2		(0.3)		0.4		(3.3)		1.9	
8	573.8	6.0	567.8	2.2	565.6	(4.1)	569.7	(2.5)	572.2	8
	1.4		(2.8)		(1.6)		(4.3)		(0.2)	
9	572.4	1.8	570.6	3.4	567.2	(6.8)	574	1.6	572.4	9
	2.6		(0.5)		(1.1)		4.9		3.1	
10	569.8	(1.3)	571.1	2.8	568.3	(0.8)	569.1	(0.2)	569.3	10
	(3.5)		(2.3)		(1.7)		1.0		1.5	
11	573.3	(0.1)	573.4	3.4	570	1.9	568.1	0.3	567.8	11
	(2.3)		(0.6)		(1.6)		(3.5)		(4.5)	
12	575.6	1.6	574	2.4	571.6	0.0	571.6	(0.7)	572.3	12
	E		D		C		B		A	

1573.3

	Start Level Point
	Indicates results over 6.5 mm
	Indicates results over 15 mm
V	Indicates unable to survey due to obstruction
	판넬 구간
	조인트 구간

Total Measurement Point	Point		103	
Property IV 95% Over +-6.5mm	95%	EA	4	3.88%
Property IV 100% Over +-15mm	100%	EA	0	0.00%
Total Fail		EA	4.0	PASS
Greatest Diff. In Elev. Over 3M			7.7	mm
Range (Max - Min) =			10.0	mm
	Max		575.6	mm
	Min		565.6	mm

1570.4

	1		2		3		4		5		6		7		8		9		10		11		12	
E	578.4	4.8	573.6	6.2	567.4	(8.7)	576.1	2.5	573.6	3.7	569.9	(3.2)	573.1	0.8	572.3	(3.5)	575.8	0.4	575.4	2.6	572.8	(1.0)	573.8	E
	1.1		3.6		(1.6)		0.7		(0.4)		1.1		(2.2)		0.3		(3.4)		(1.5)		0.3		7.2	
D	577.3	7.3	570	1.0	569	(6.4)	575.4	1.4	574	5.2	568.8	(6.5)	575.3	3.3	572	(7.2)	579.2	2.3	576.9	4.4	572.5	5.9	566.6	D
	(0.6)		(3.8)		(2.3)		(1.7)		(4.8)		(5.4)		2.6		(2.3)		0.5		1.6		(1.1)		(8.6)	
C	577.9	4.1	573.8	2.5	571.3	(5.8)	577.1	(1.7)	578.8	4.6	574.2	1.5	572.7	(1.6)	574.3	(4.4)	578.7	3.4	575.3	1.7	573.6	(1.6)	575.2	C
	2.0		3.1		(1.5)		3.5		3.9		1.5		3.5		3.7		2.3		(0.2)		0.8		0.5	
B	575.9	5.2	570.7	(2.1)	572.8	(0.8)	573.6	(1.3)	574.9	2.2	572.7	3.5	569.2	(1.4)	570.6	(5.8)	576.4	0.9	575.5	2.7	572.8	(1.9)	574.7	B
	5.5		(1.1)		(0.4)		0.0		0.7		(2.2)		(0.8)		(4.4)		(1.4)		2.7		(4.6)		(1.9)	
A	570.4	(1.4)	571.8	(1.4)	573.2	(0.4)	573.6	(0.6)	574.2	(0.7)	574.9	4.9	570	(5.0)	575	(2.8)	577.8	5.0	572.8	(4.6)	577.4	0.8	576.6	A
	1		2		3		4		5		6		7		8		9		10		11		12	

	Start Level Point
	Indicates results over 6.5 mm
	Indicates results over 15 mm
V	Indicates unable to survey due to obstruction
	판넬 구간
	조인트 구간

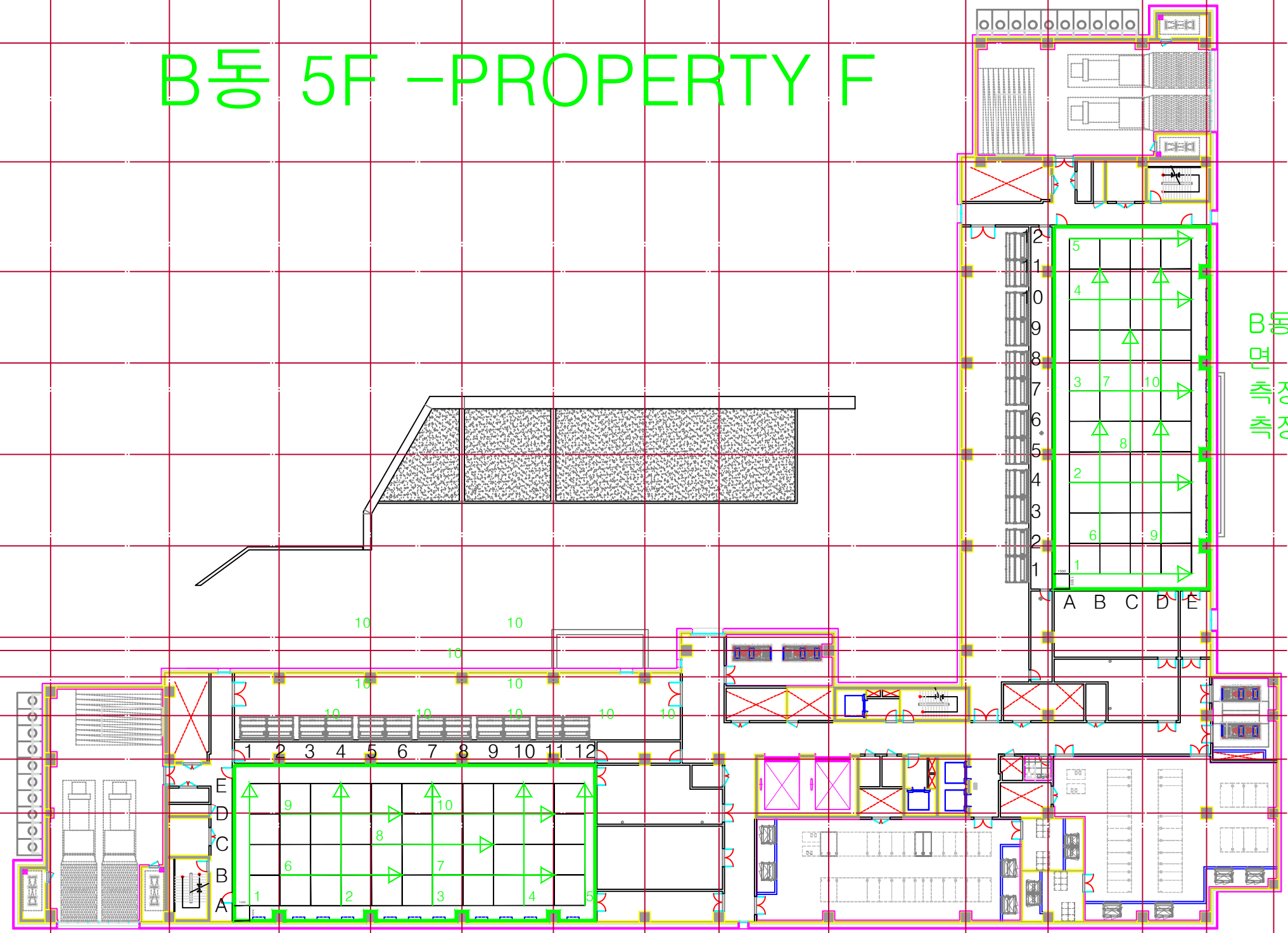
Total Measurement Point		Point		103	
Property IV 95% Over +-6.5mm		95%	EA	5	4.85%
Property IV 100% Over +-15mm		100%	EA	0	0.00%
Total Fail			EA	5.0	PASS
Greatest Diff. In Elev. Over 3M				8.7	mm
Range (Max - Min) =				12.6	mm
		Max		579.2	mm
		Min		566.6	mm

1 2 3 4 5 6 7 8 9 10 11 11A 12 13
120,400

11,700 10,800 9,000 9,000 9,000 9,000 7,300 10,800 13,500 8,100 9,300 6,300 6,600

K
J
H
G
F
E
D
C2
C1
C
B1
B
A
86,100
11,700
10,800
9,000
9,000
9,000
9,000
9,000
1,300
3,800
2,600
4,300
5,300
10,300

B동 5F - PROPERTY F



B동 5F #2
면 적 : 541m²
측정회수 : 10회
측정길이 : 12M

B동 5F #1
면 적 : 541m²
측정회수 : 10회
측정길이 : 12M

ALLENFACE KOREA LTD
TR34 (4th EDITION) ANALYSIS INSTRUCTIONS

Support by	AllenFace
	AllenFace Europe
	e-mail: af@allenface.com / allenface@naver.com
Further information	www.allenface.com www.allenface-europe.com
	https://blog.naver.com/allenface_korea
Project Name	
Project Address	
Concrete Floor Installer	
Testing Organization	ALLENFACE KOREA
Slab ID	지상5층 #2
Date of Pouring	
Date of Testing	2025-11-10
Test Apparatus	D-Meter® Manufactured by AllenFace & Company, Serial Number: 697
Testing Technician	TAEBYUNG HEO (ALLENFACE KOREA)
Total Test Area(m2)	541
Comments	
City	
Signee	TAEBYUNG HEO (ALLENFACE KOREA)
Specified floor class	TR34 4th Version FM2

지상5층 #2

Run Number:	11	12	13	14	15	16	17	18	19	20
Length of Run (m):	12	12	12	12	12	12	12	12	12	12
Run Date:	11/10/25	11/10/25	11/10/25	11/10/25	11/10/25	11/10/25	11/10/25	11/10/25	11/10/25	11/10/25
Run Time:	03:01 UTC	03:04 UTC	03:06 UTC	03:09 UTC	03:11 UTC	03:14 UTC	03:17 UTC	03:19 UTC	03:22 UTC	03:24 UTC
FF	30.4	45.1	31.7	39.5	39.0	47.6	43.4	40.2	39.1	50.4
<90% CI>	<24.2-36.6>	<35.9-54.3>	<25.3-38.1>	<32.3-46.7>	<31.9-46.1>	<37.9-57.3>	<34.6-52.2>	<32.0-48.4>	<31.6-46.6>	<40.2-60.6>
FL	32.5	61.0	32.4	75.7	39.3	51.2	19.4	32.9	32.4	45.7
<90% CI>	<26.5-38.5>	<47.1-74.9>	<26.6-38.2>	<58.4-93.0>	<30.3-48.3>	<39.5-62.9>	<15.0-23.8>	<26.5-39.3>	<25.5-39.3>	<35.3-56.1>
Run Status:	Ok	Ok	Ok	Ok	Ok	Ok	Ok	Ok	Ok	Ok
Run Length (m)	H's (mm x 100)	H's (mm x 100)	H's (mm x 100)	H's (mm x 100)	H's (mm x 100)	H's (mm x 100)	H's (mm x 100)	H's (mm x 100)	H's (mm x 100)	H's (mm x 100)
0.00	-20	180	-401	114	254	124	632	-246	69	282
0.30	191	101	-511	91	165	30	742	-335	94	208
0.60	122	48	-478	-28	295	-33	625	-427	66	318
0.90	43	10	-455	-43	384	-66	477	-419	-13	391
1.20	142	0	-300	114	396	-51	488	-338	-173	460
1.50	328	-20	-76	175	300	20	432	-239	-269	531
1.80	221	-23	26	89	175	104	417	-313	-124	434
2.10	163	28	211	94	112	102	406	-450	-185	282
2.40	163	36	462	89	206	64	371	-404	-107	208
2.70	247	41	635	13	236	76	241	-261	-66	231
3.00	357	-13	410	84	221	142	149	-147	-168	239
3.30	470	-46	199	38	246	145	12	-63	-254	302
3.60	391	-81	44	-20	318	165	-197	-55	-160	274
3.90	277	-117	118	28	462	117	-331	-53	-127	203
4.20	312	-30	184	48	287	152	-423	-89	-264	114
4.50	333	43	221	122	234	185	-435	-102	-239	85
4.80	340	-92	239	94	246	114	-354	-36	-142	42
5.10	323	-142	239	61	244	7	-265	-70	0	-69
5.40	287	-221	343	140	246	-15	-242	67	41	-61
5.70	134	-218	414	152	262	38	-326	146	36	-97
6.00	-13	-150	348	142	104	58	-372	180	23	-142
6.30	-153	-71	175	68	-33	0	-310	160	56	-90
6.60	-283	-20	122	-8	-41	-168	-302	269	117	-40
6.90	-379	-58	76	-61	-47	-239	-378	369	272	-13
7.20	-458	-163	97	-48	-84	-193	-343	504	275	-38
7.50	-280	-147	66	-25	-152	-114	-269	432	285	28
7.80	-28	-13	74	-86	-81	-35	-211	355	298	-8
8.10	-30	33	74	-38	-107	33	-173	269	363	-13
8.40	-58	81	46	-97	-118	-43	-96	292	356	-114
8.70	-130	18	53	-188	-153	-170	-23	216	287	-203
9.00	-190	-41	158	-201	-239	-246	-4	180	241	-211
9.30	-218	25	-23	-137	-267	-198	64	157	170	-216
9.60	-216	165	-198	15	-262	-122	67	165	43	-251
9.90	-226	114	-145	46	-274	-224	34	142	0	-231
10.20	-206	117	-206	-114	-348	-246	29	113	-10	-193
10.50	-297	79	-284	-175	-508	-140	84	75	-69	-218
10.80	-422	30	-318	-97	-522	-15	5	-16	-62	-287
11.10	-351	76	-336	-119	-472	147	-30	-48	-135	-364
11.40	-267	142	-369	-46	-480	168	-3	-97	-209	-475
11.70	-236	117	-433	-158	-414	163	109	-130	-120	-521
12.00	-157	190	-499	-99	-467	140	69	3	-140	-490

TR34 (4th edition) Free Movement Floor Tolerance Report

Allen Face Europe TR34 Analysis, ©Allen Face Europe, www.allenface-europe.com

1. Project Name:
Project Location:

2. Concrete Floor Installer:

3. Testing Organization:

5. Floor Tolerance Requirements:

ALLENFACE KOREA

TR34 FREE MOVEMENT FLOOR TOLERANCES		
Floor Classification	Property F (mm)	Property E (mm)
	95% limit	95% limit
FM1	1.8	4.5
FM2	2.0	6.5
FM3	2.2	8.0
FM4	2.4	10.0

4. Slab ID: 지상5층 #2
 Date of Pouring: 1900-01-00
 Date of Testing: 2025-11-10
 Test Apparatus: D-Meter® Manufactured by AllenFace & Company, Serial Number: 697
 Testing Technician: TAEBYUNG HEO (ALLENFACE KOREA)
 Test Area: 541 m² (for test area organization see attached drawing)

TR34 4th Edition Convert into FF/FL number 값				
4th Edition	95%		F number	
등급	Property F mm(±)	Property E mm(±)	FF	FL
FM1	1.8	4.5	42.9	46.6
FM2	2.0	6.5	38.6	32.3
FM3	2.2	8.0	35.1	26.2
FM4	2.4	10.0	32.2	21.0

Any point on the Property E survey grid is outside the ±15mm of datum

6. Analysis:

TR34 FREE MOVEMENT RESULTS

Run #:	11	12	13	14	15	16	17	18	19	20						All Runs:	
Run Length (m):	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00						120.00	
FM1	Property F (95%)	NO	NO	NO	NO	NO	YES	YES	NO	NO	YES						NO
	% Defective	18.42%	5.26%	10.53%	5.26%	5.26%	0.00%	2.63%	5.26%	5.26%	2.63%						6.05%
	Property E (95%)	NO	YES	NO	YES	YES	YES	NO	NO	NO	YES						NO
FM2	% Defective	16.67%	0.00%	23.33%	0.00%	3.33%	0.00%	36.67%	10.00%	13.33%	0.00%						10.33%
	Property F (95%)	NO	YES	NO	YES	NO	YES	YES	YES	NO	YES						YES
	% Defective	13.16%	2.63%	10.53%	0.00%	5.26%	0.00%	2.63%	2.63%	5.26%	0.00%						4.21%
FM3	Property E (95%)	NO	YES	NO	YES	YES	YES	NO	YES	YES						YES	
	% Defective	10.00%	0.00%	10.00%	0.00%	0.00%	0.00%	23.33%	0.00%	0.00%	0.00%						4.33%
	Property F (95%)	NO	YES	NO	YES	YES	YES	YES	YES	YES	YES						YES
FM4	% Defective	10.53%	0.00%	10.53%	0.00%	2.63%	0.00%	2.63%	0.00%	2.63%	0.00%						2.89%
	Property E (95%)	YES	YES	YES	YES	YES	YES	NO	YES	YES						YES	
	% Defective	0.00%	0.00%	3.33%	0.00%	0.00%	0.00%	13.33%	0.00%	0.00%	0.00%						1.67%
FM4	Property F (95%)	NO	YES	NO	YES	YES	YES	YES	YES	YES						YES	
	% Defective	10.53%	0.00%	5.26%	0.00%	2.63%	0.00%	0.00%	0.00%	2.63%	0.00%						2.11%
	Property E (95%)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES						YES
% Defective	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%						0.00%	

7. Summary: The analysed D-Meter® Runs satisfy the FM2 floor tolerance requirements.

TAEBYUNG HEO (ALLENFACE KOREA)

TR34 (4th edition) Free Movement Floor Tolerance Report

AllenFace Europe TR34 Analysis, ©AllenFace Europe, www.allenface-europe.com

1. Project Name:
Project Location:

2. Concrete Floor Installer:

3. Testing Organization:

5. Floor Tolerance Requirements:

ALLENFACE KOREA

TR34 FREE MOVEMENT FLOOR TOLERANCES		
Floor Classification	Property F (mm) 100% limit	Property E (mm) 100% limit
FM1	15.0	15.0
FM2	15.0	15.0
FM3	15.0	15.0
FM4	15.0	15.0

4.

Slab ID: 지상5층 #2
 Date of Pouring: 1900-01-00
 Date of Testing: 2025-11-10
 Test Apparatus: D-Meter® Manufactured by AllenFace & Company, Serial Number: 697
 Testing Technician: TAEBYUNG HEO (ALLENFACE KOREA)
 Test Area: 541 m² (for test area organization see attached drawing)

Any point on the Property E survey grid is outside the ±15mm of datum

6. Analysis:

TR34 FREE MOVEMENT RESULTS

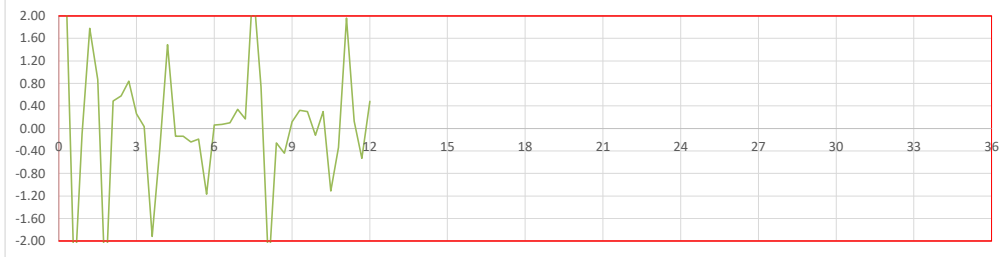
Run #:	11	12	13	14	15	16	17	18	19	20									All Runs:
Run Length (m):	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00									120.00
FM1	Property F (100%)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES								YES
	% Defective	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%								0.00%
FM2	Property E (100%)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES								YES
	% Defective	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%								0.00%
FM3	Property F (100%)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES								YES
	% Defective	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%								0.00%
FM4	Property E (100%)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES								YES
	% Defective	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%								0.00%

7. Summary: The analysed D-Meter® Runs satisfy the FM1 floor tolerance requirements.

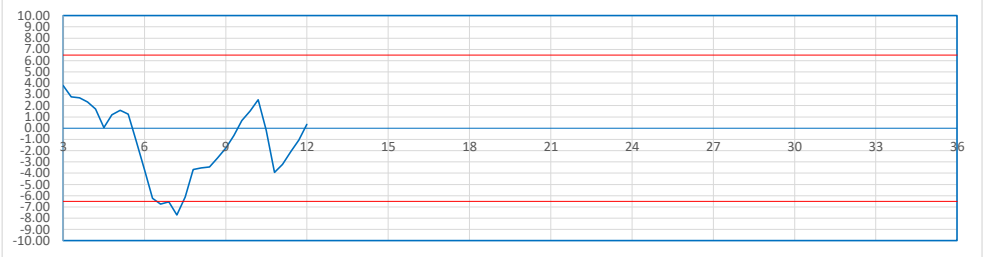
TAEBYUNG HEO (ALLENFACE KOREA)

Run #: 11

Property F

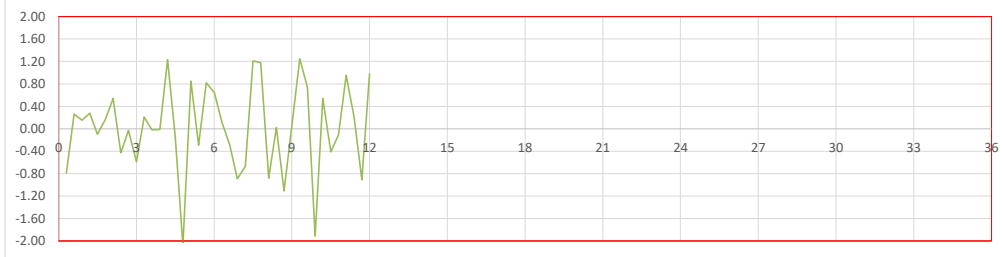


Property E

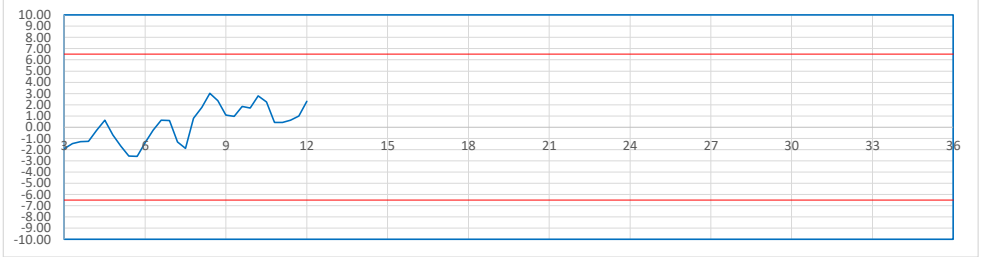


Run #: 12

Property F

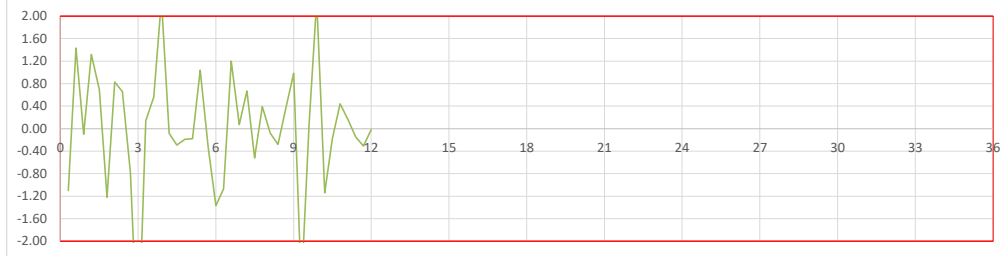


Property E

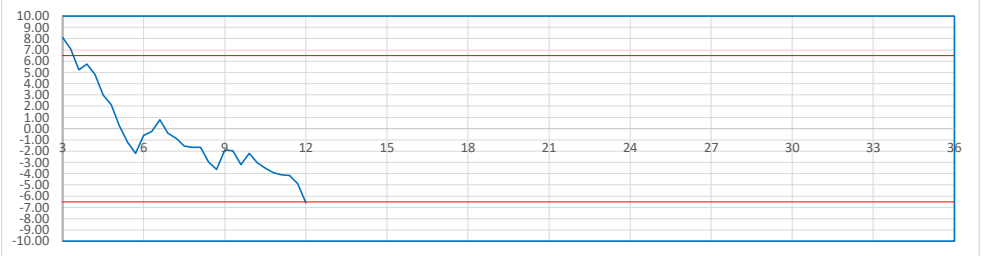


Run #: 13

Property F

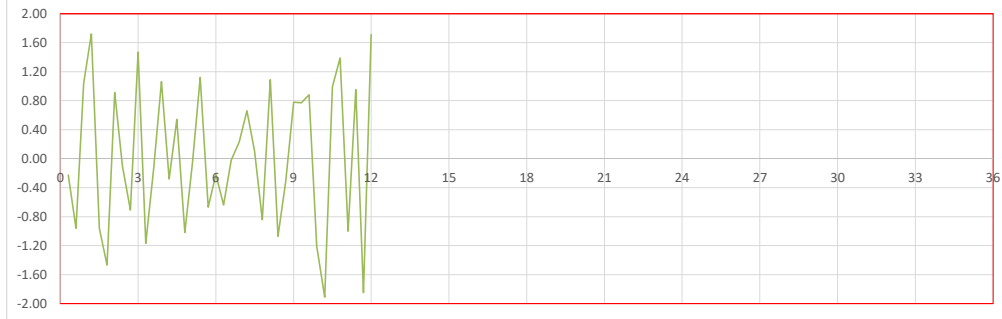


Property E

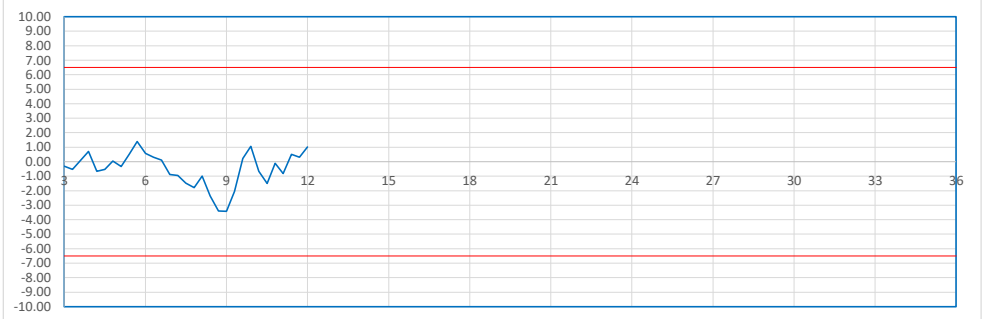


Run #: 14

Property F

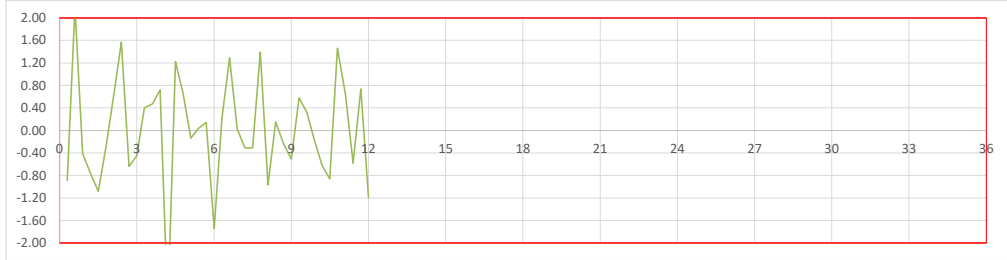


Property E

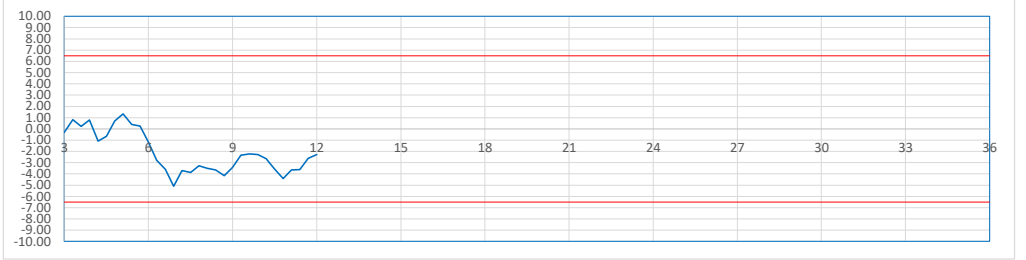


Run #: 15

Property F



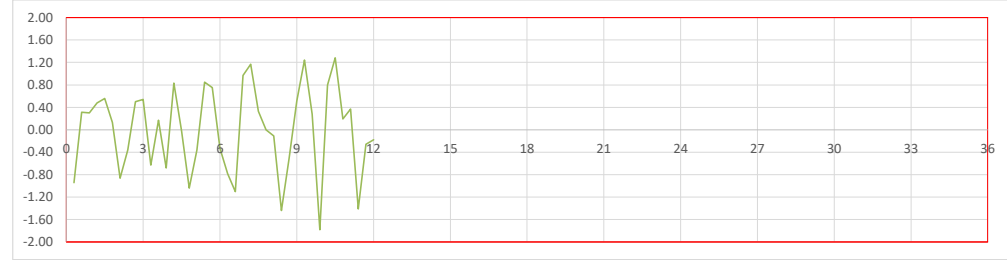
Property E



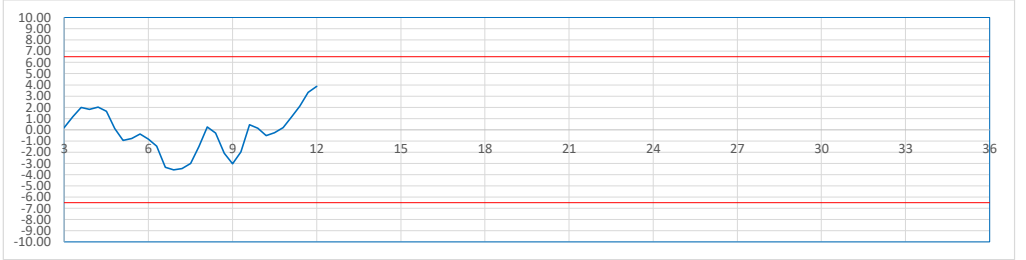
11

Run #: 16

Property F

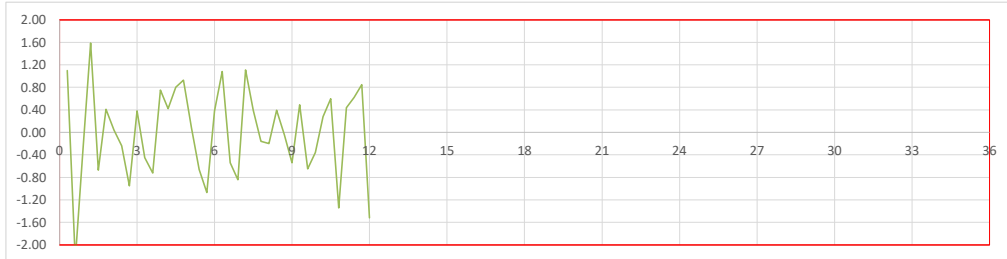


Property E

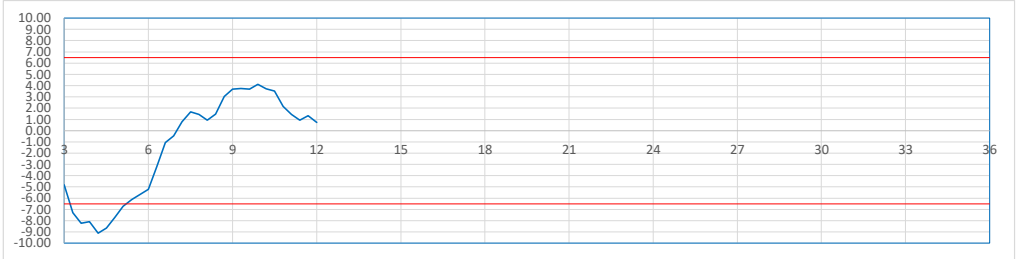


Run #: 17

Property F

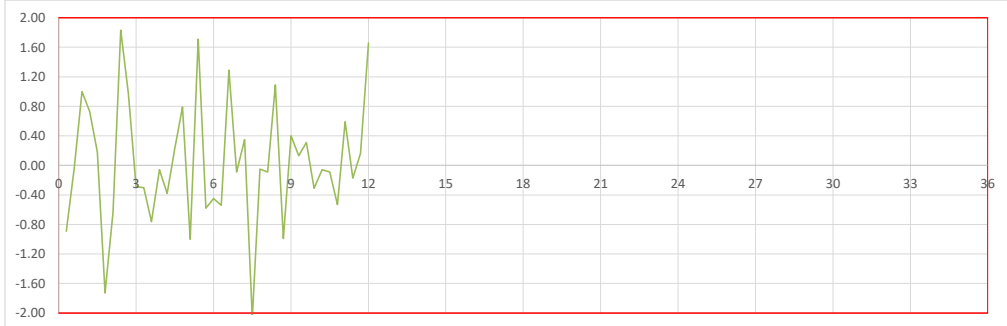


Property E

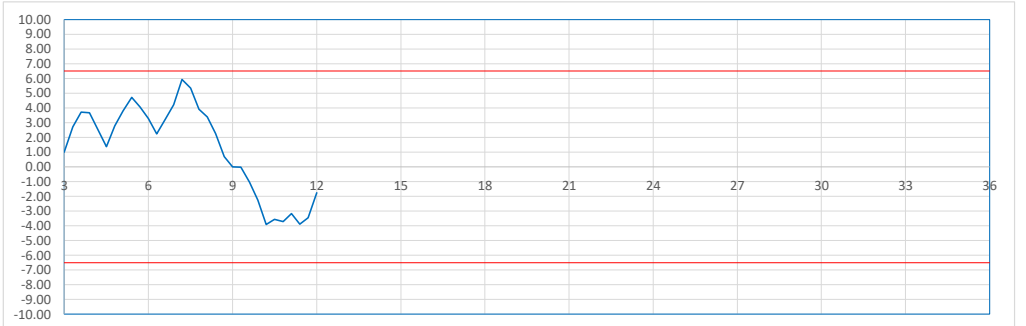


Run #: 18

Property F

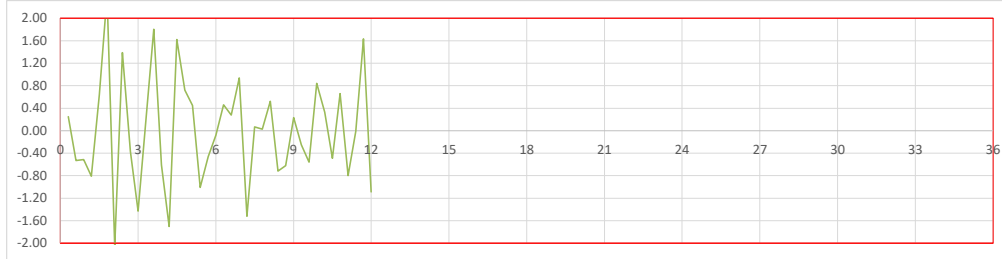


Property E

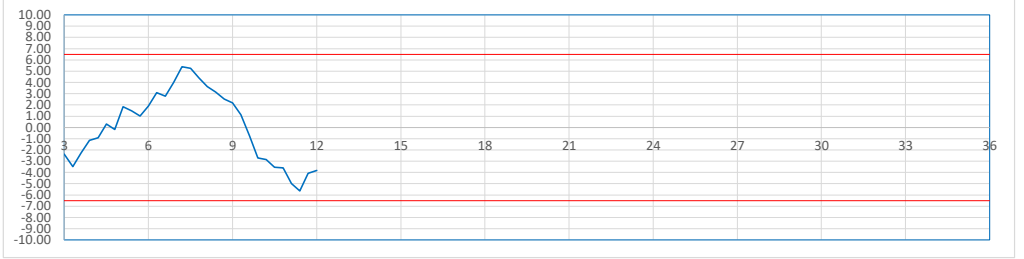


Run #: 19

Property F

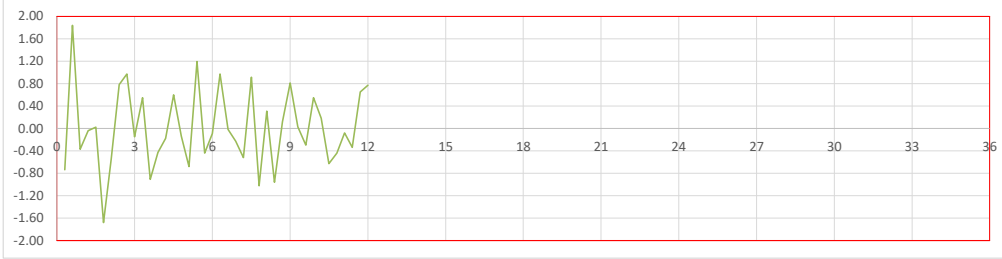


Property E

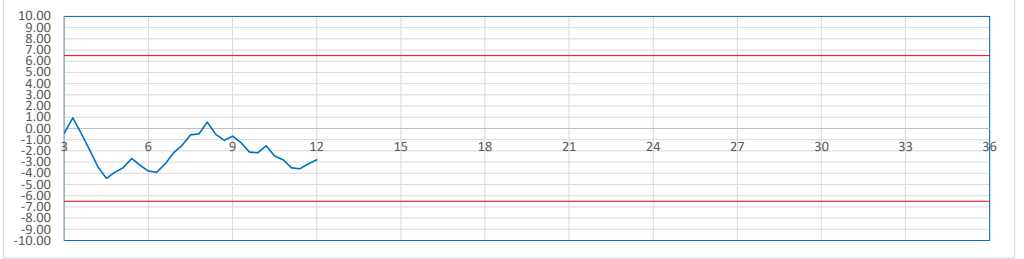


Run #: 20

Property F

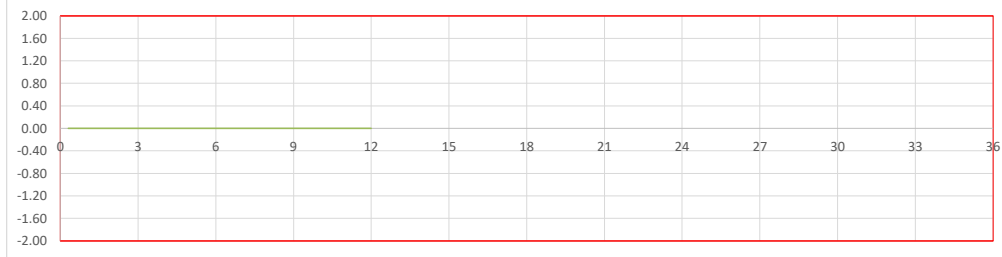


Property E

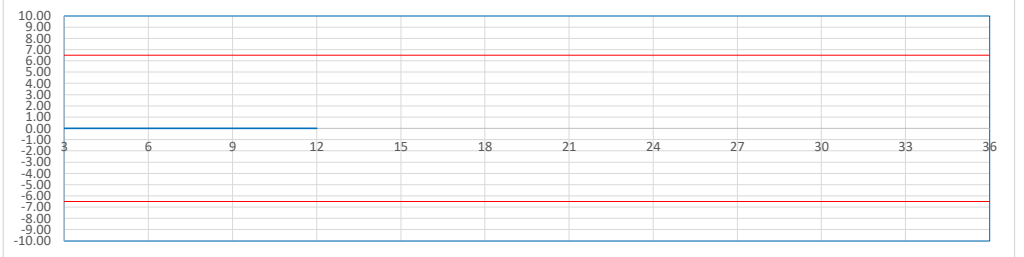


Run #: 0

Property F

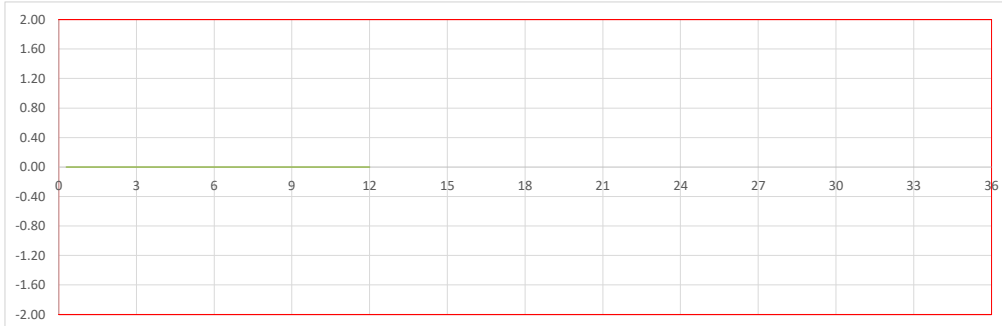


Property E



Run #: 0

Property F



Property E

