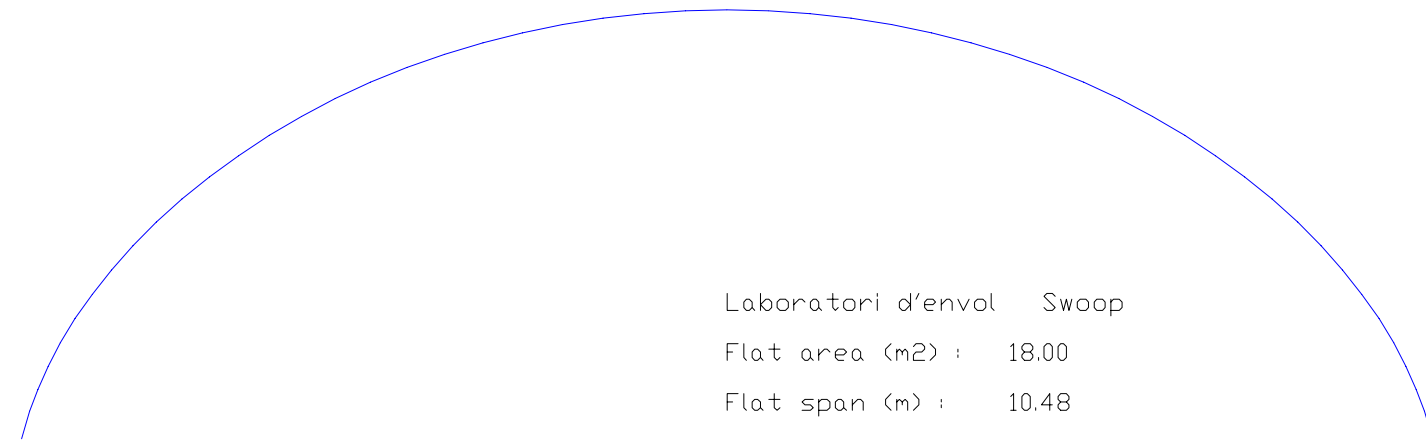


SWOOP 18



Laboratori d'envol Swoop

Flat area (m2) : 18.00

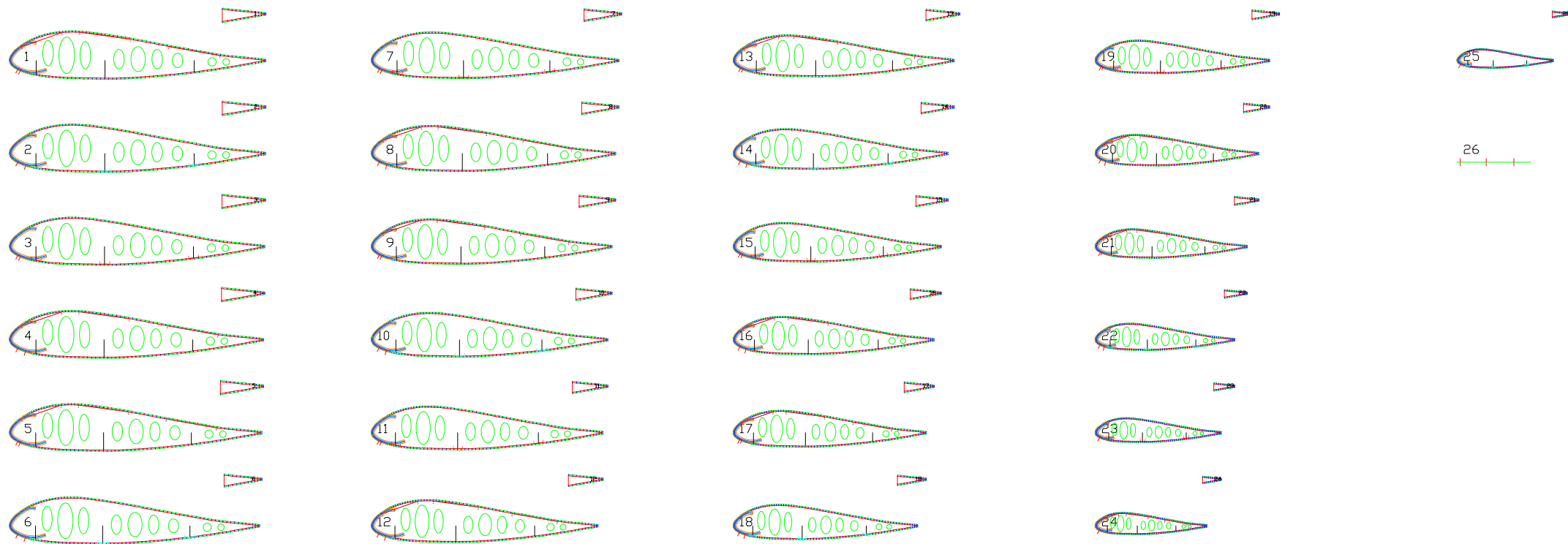
Flat span (m) : 10.48

Flat aspect ratio : 6.10

Cells number : 50

Version 1: 20251205

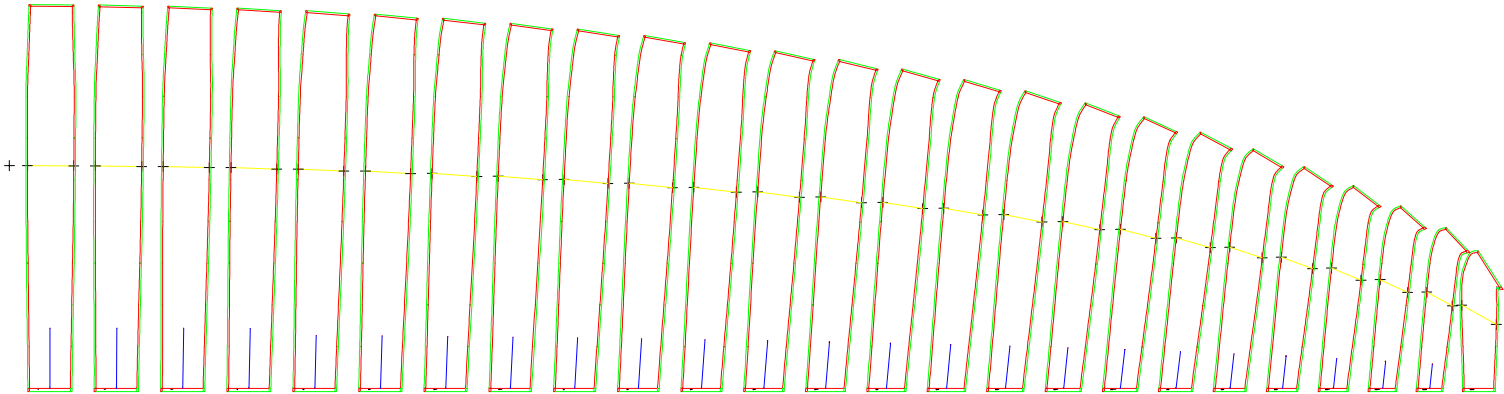
Version 2: 20260101 (CAD IMPROVEMENTS, RIB REINFORCEMENTS)



Leading edge

Trailing edge

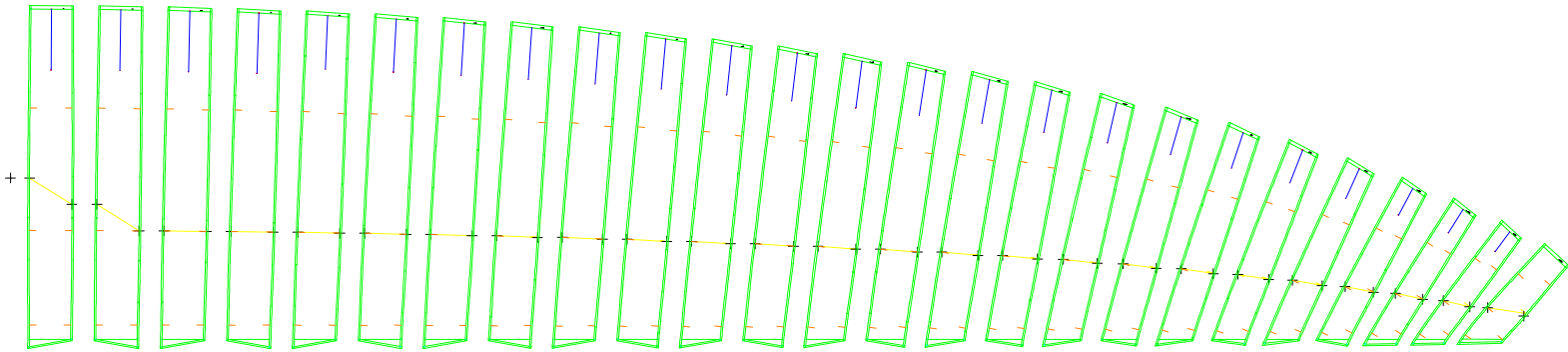
1-3 EXTRADOS PANELS

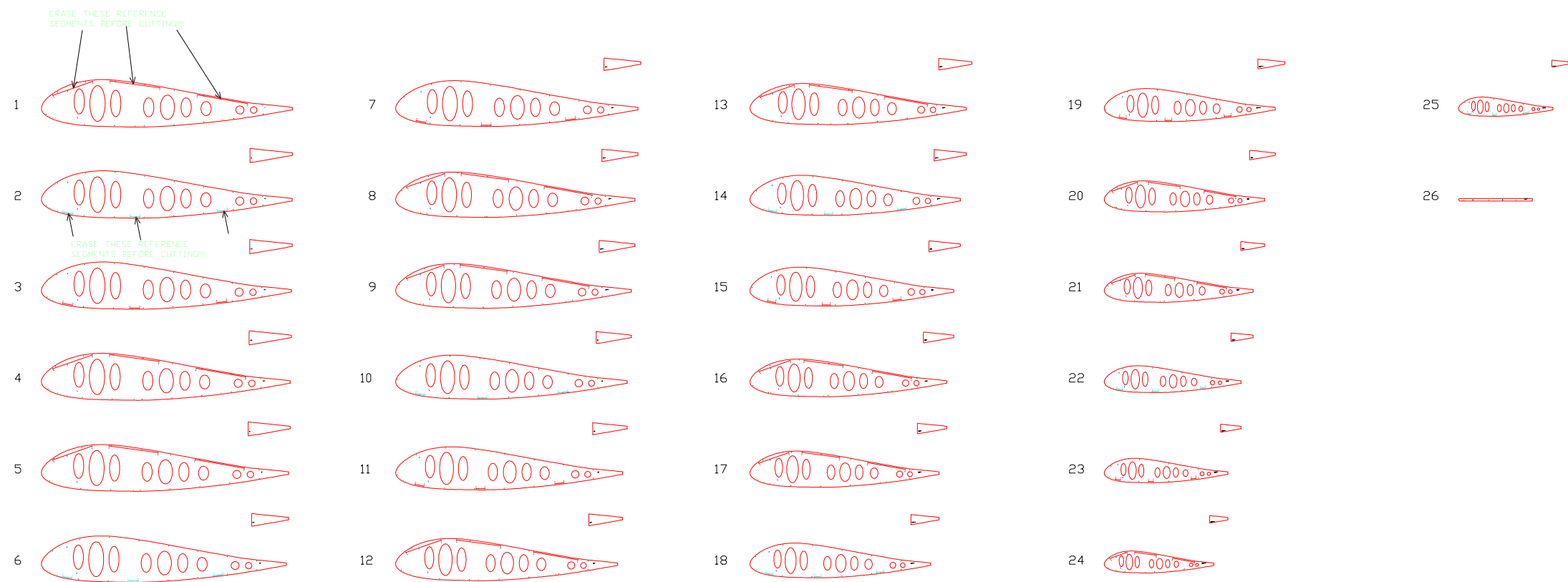


Trailing edge

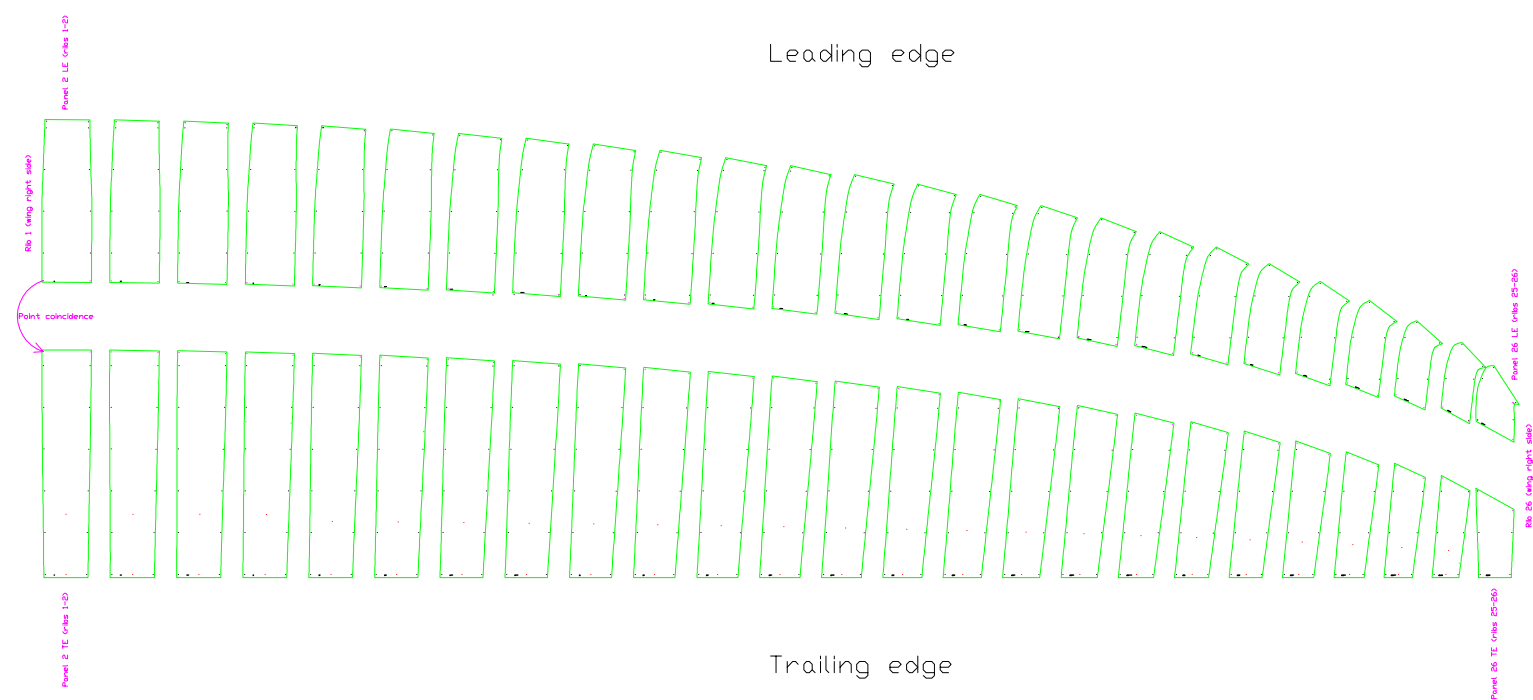
Leading edge

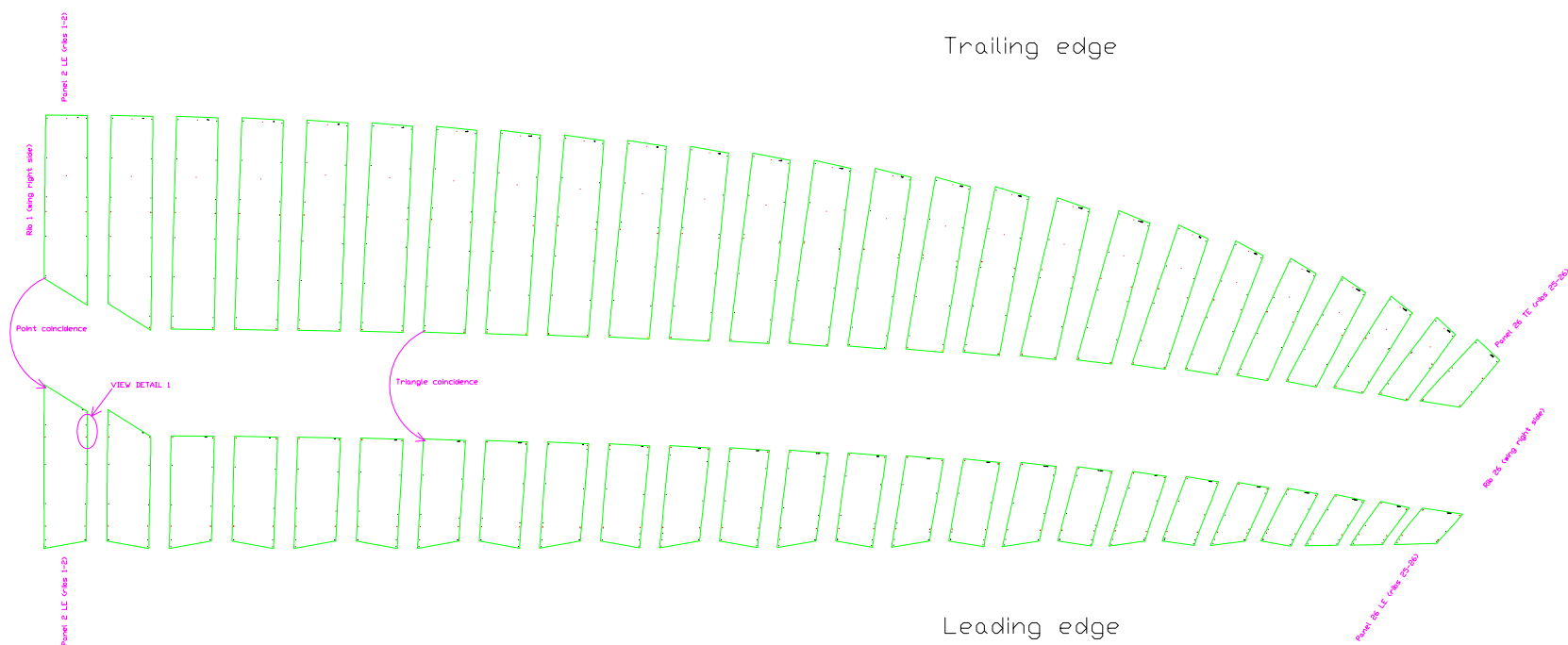
2-3 INTRADOS PANELS



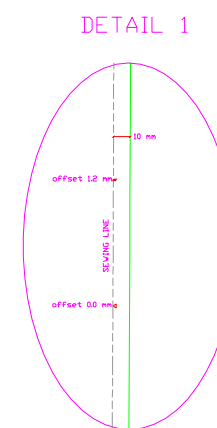


SCALE X 10 (cm to mm)





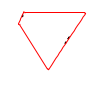
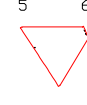
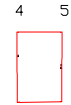
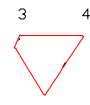
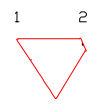
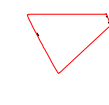
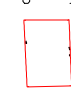
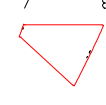
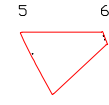
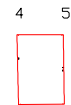
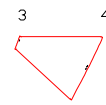
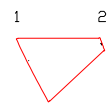
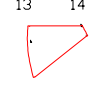
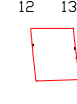
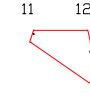
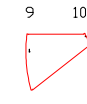
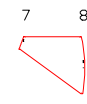
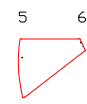
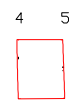
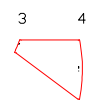
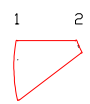
SCALE X 10 (cm to mm)



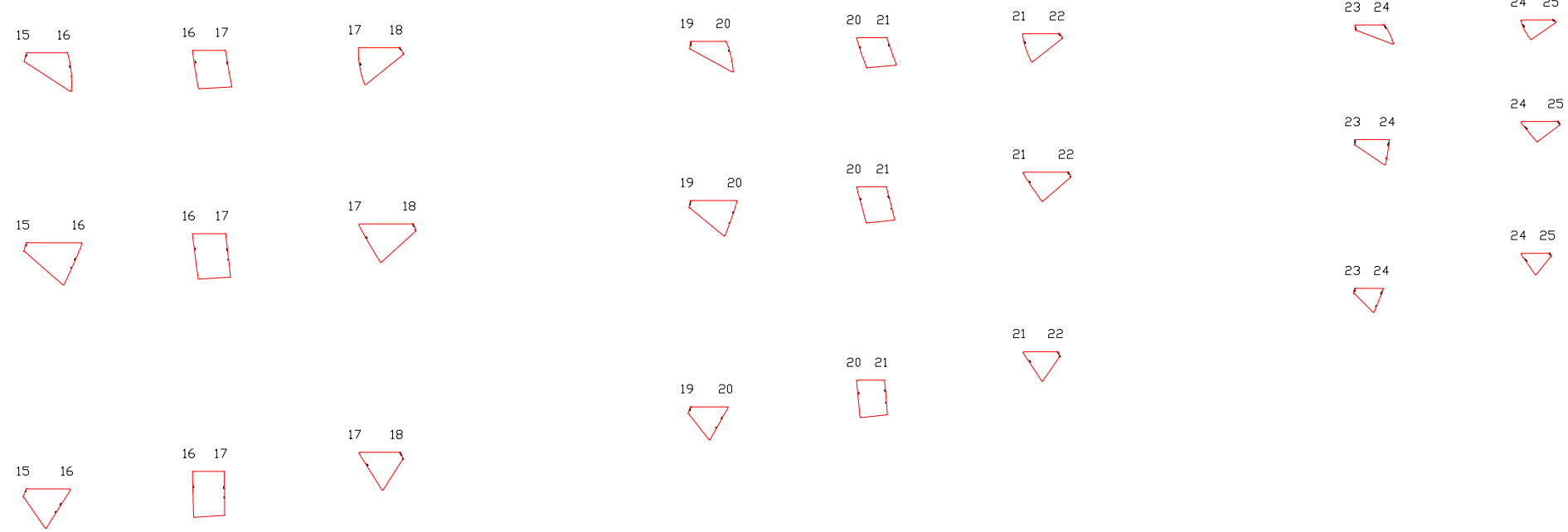
1 2	2 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
1 2	2 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
1 2	2 3	3 4	4 5	5 6	6 7	7 8	8 9	9 10	10 11	11 12	12 13	13 14	14 15	15 16
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

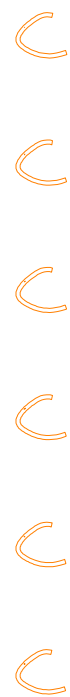
SCALE X 10 (cm to mm)

16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
16 17	17 18	18 19	19 20	20 21	21 22	22 23	23 24
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>



SCALE X 10 (cm to mm)





SCALE X 10 (cm to mm)

List of nylon rods (bloc 1)

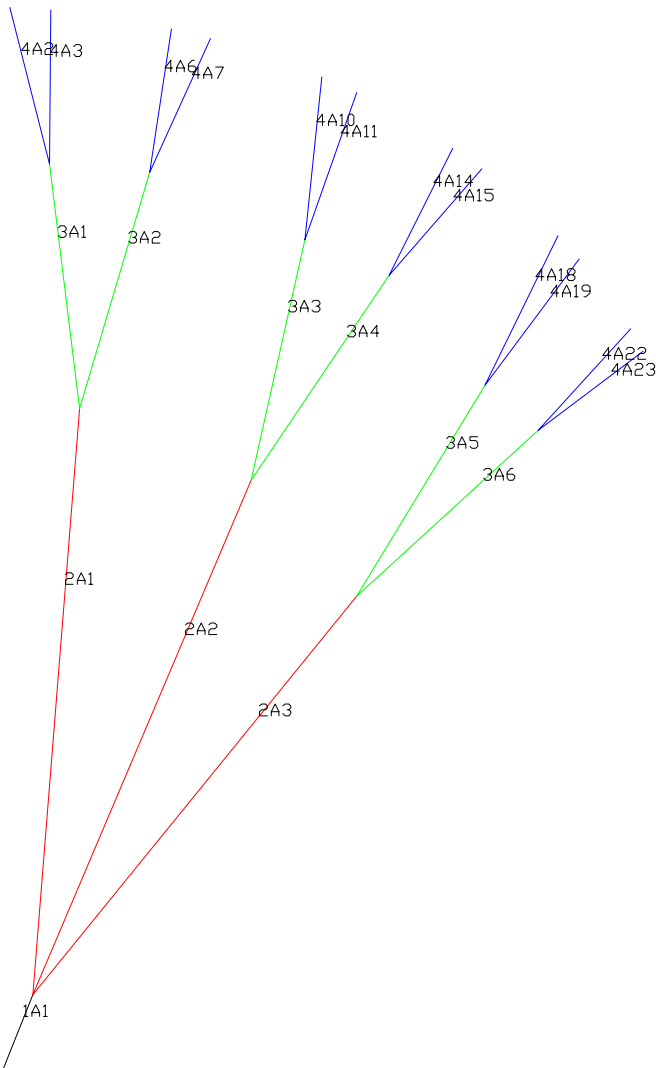
Group	1	
Jonc	1	61.3
Jonc	2	61.3
Jonc	3	61.1
Jonc	4	60.8
Jonc	5	60.4
Jonc	6	59.9
Jonc	7	59.2
Jonc	8	58.4
Jonc	9	57.6
Jonc	10	56.6
Jonc	11	55.4
Jonc	12	54.2
Jonc	13	52.8
Jonc	14	51.4
Jonc	15	49.7
Jonc	16	48.0
Jonc	17	46.1
Jonc	18	44.0
Jonc	19	41.7
Jonc	20	39.1
Jonc	21	36.3
Jonc	22	33.3
Jonc	23	30.0
Jonc	24	26.6
Jonc	25	22.9



RECOMMENDED RIB REINFORCEMENTS

Line - Label - Length

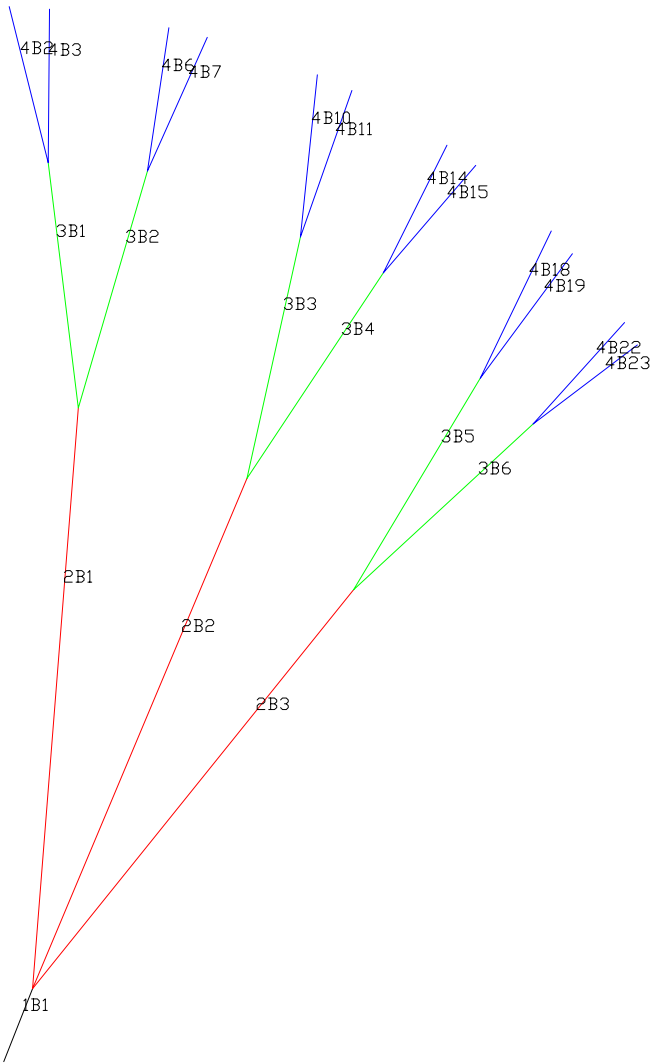
1	1A1	47.0
2	2A1	351.9
3	2A2	334.9
4	2A3	309.9
5	3A1	147.9
6	3A2	147.9
7	3A3	147.9
8	3A4	148.0
9	3A5	148.0
10	3A6	148.0
11	4A2	97.1
12	4A3	92.6
13	4A6	87.5
14	4A7	88.7
15	4A10	98.0
16	4A11	93.3
17	4A14	85.7
18	4A15	85.3
19	4A18	97.7
20	4A19	92.6
21	4A22	81.7
22	4A23	79.5



3-2 LINES A

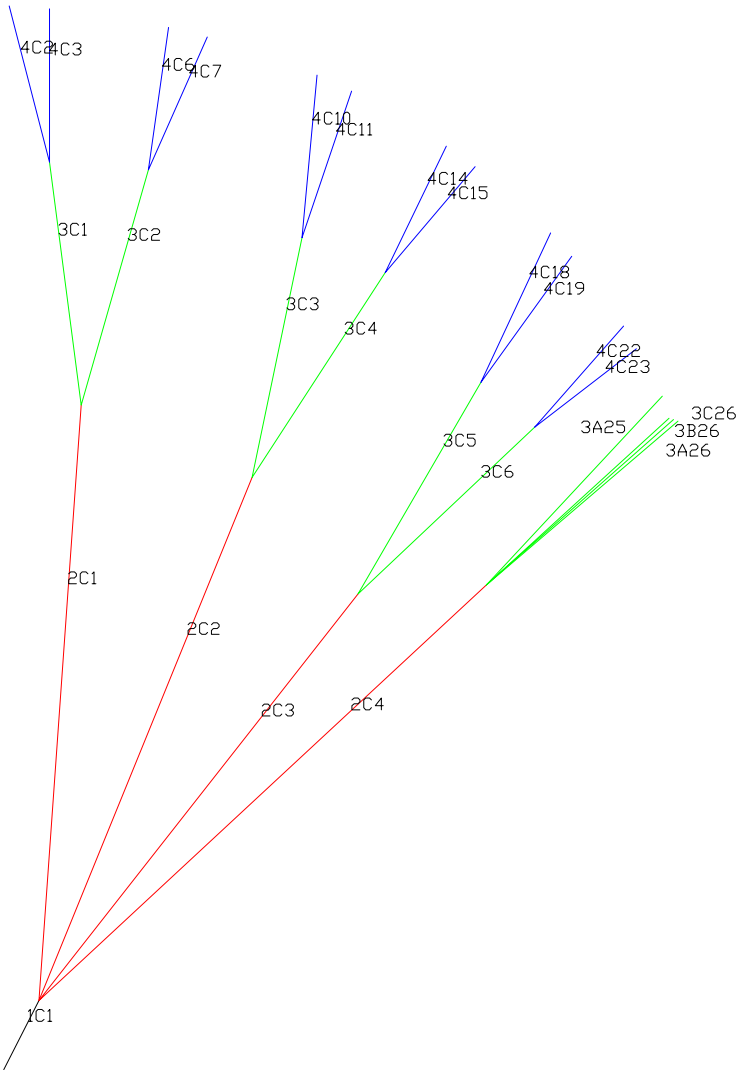
Line - Label - Length

23	1B1	47.0
24	2B1	347.9
25	2B2	332.9
26	2B3	309.9
27	3B1	147.9
28	3B2	147.9
29	3B3	147.9
30	3B4	148.0
31	3B5	148.0
32	3B6	148.0
33	4B2	96.6
34	4B3	92.3
35	4B6	87.4
36	4B7	88.6
37	4B10	96.4
38	4B11	92.0
39	4B14	85.0
40	4B15	84.8
41	4B18	96.1
42	4B19	91.4
43	4B22	81.4
44	4B23	79.3



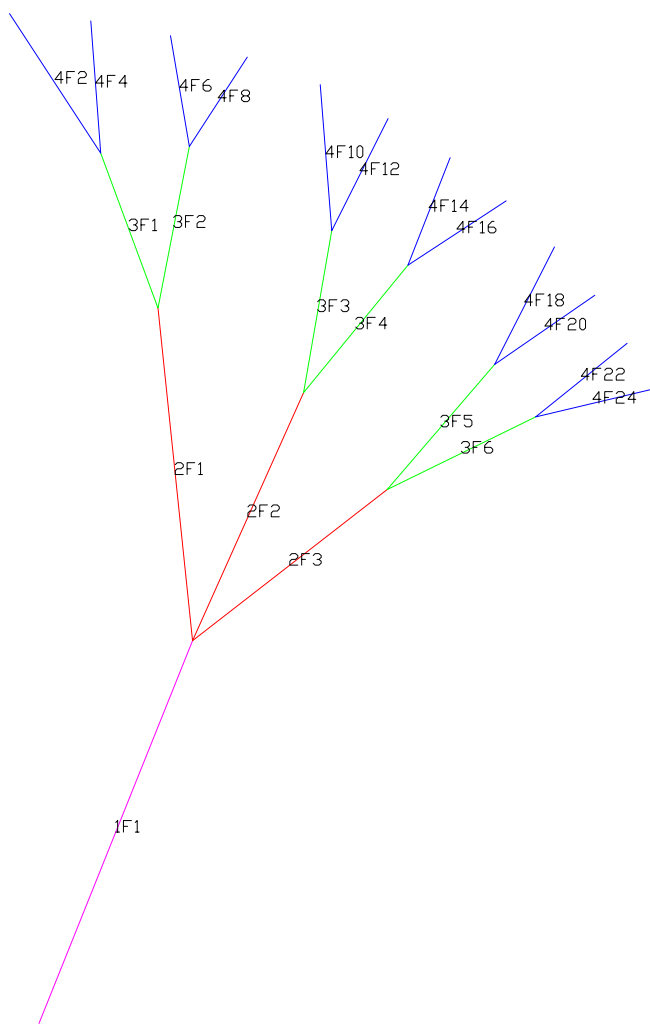
Line - Label - Length

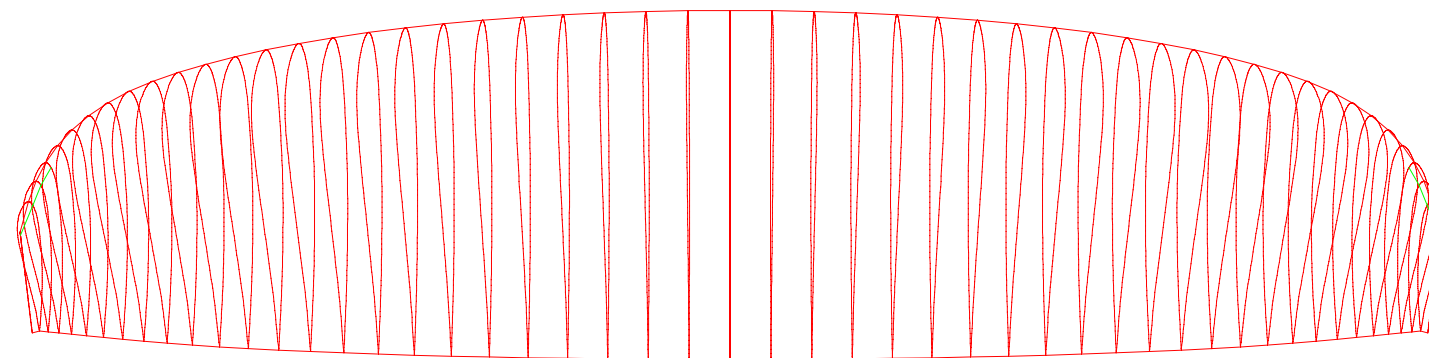
45	1C1	47.0
46	2C1	359.9
47	2C2	342.0
48	2C3	316.0
49	2C4	370.0
50	3C1	148.0
51	3C2	148.0
52	3C3	148.0
53	3C4	148.0
54	3C5	148.0
55	3C6	148.0
56	3A25	155.2
57	3A26	152.5
58	3B26	154.5
59	3C26	159.9
60	4C2	96.9
61	4C3	92.4
62	4C6	87.0
63	4C7	88.0
64	4C10	97.9
65	4C11	93.2
66	4C14	85.2
67	4C15	84.7
68	4C18	97.7
69	4C19	92.6
70	4C22	81.0
71	4C23	78.2



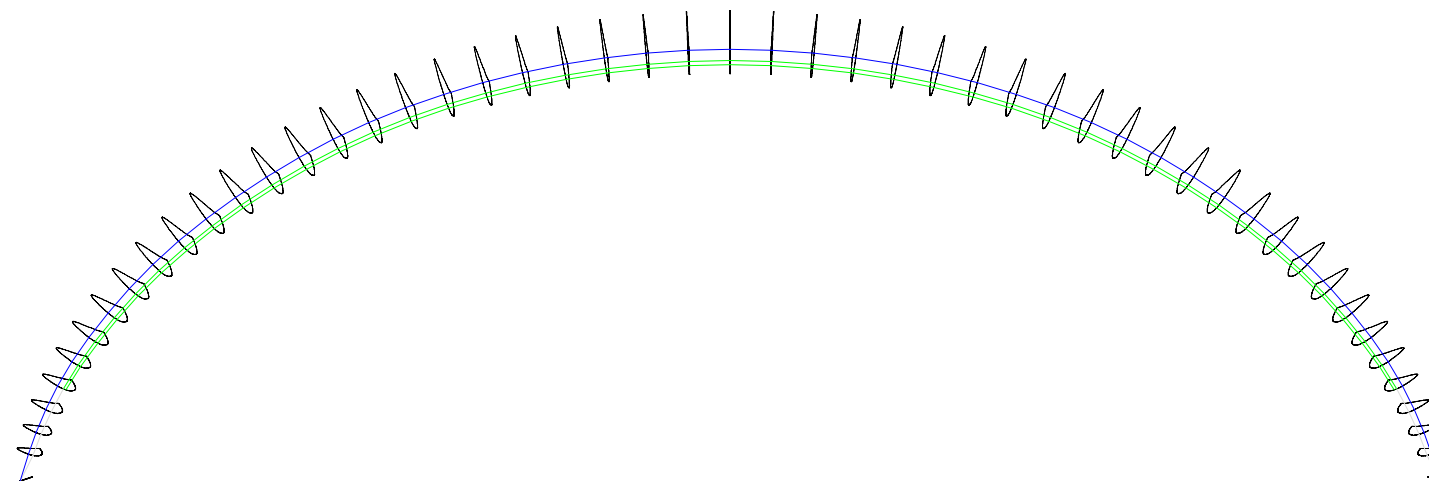
Line - Label - Length

72	1F1	254.0
73	2F1	204.0
74	2F2	167.0
75	2F3	152.0
76	3F1	101.0
77	3F2	101.0
78	3F3	101.0
79	3F4	101.0
80	3F5	101.0
81	3F6	101.0
82	4F2	101.1
83	4F4	81.1
84	4F6	69.0
85	4F8	65.5
86	4F10	89.1
87	4F12	76.7
88	4F14	70.9
89	4F16	71.9
90	4F18	80.3
91	4F20	74.1
92	4F22	71.5
93	4F24	71.7

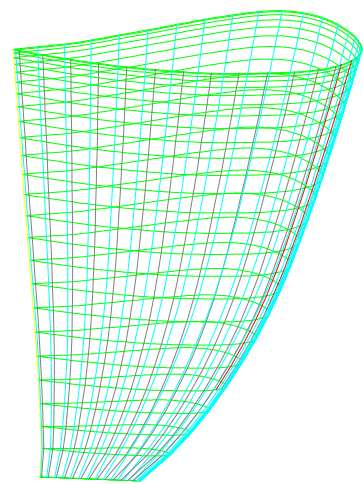




3-1 UPPER VIEW

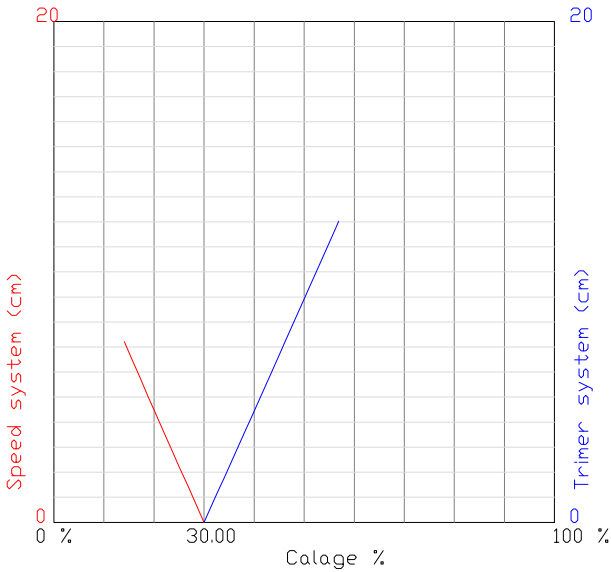
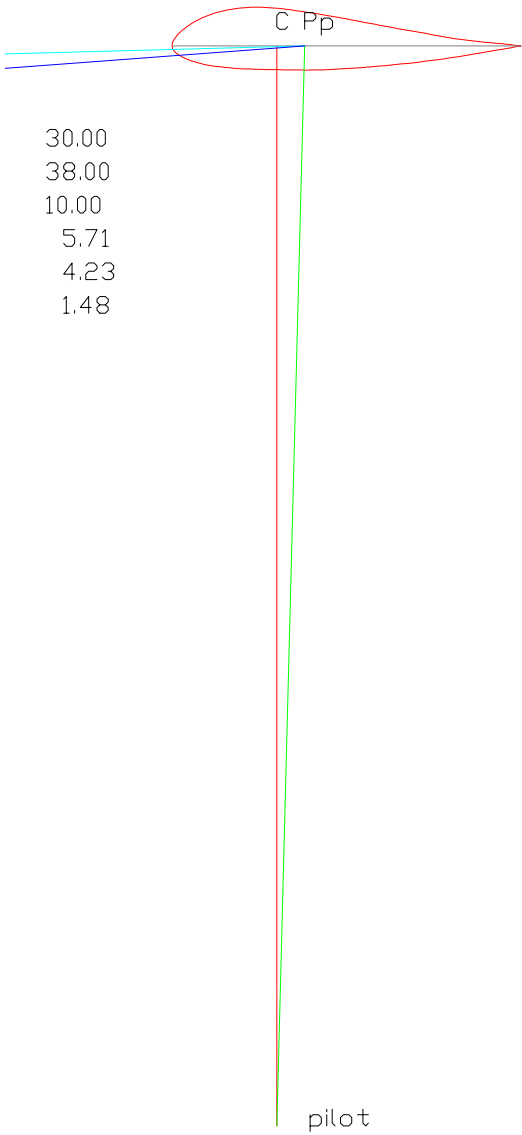


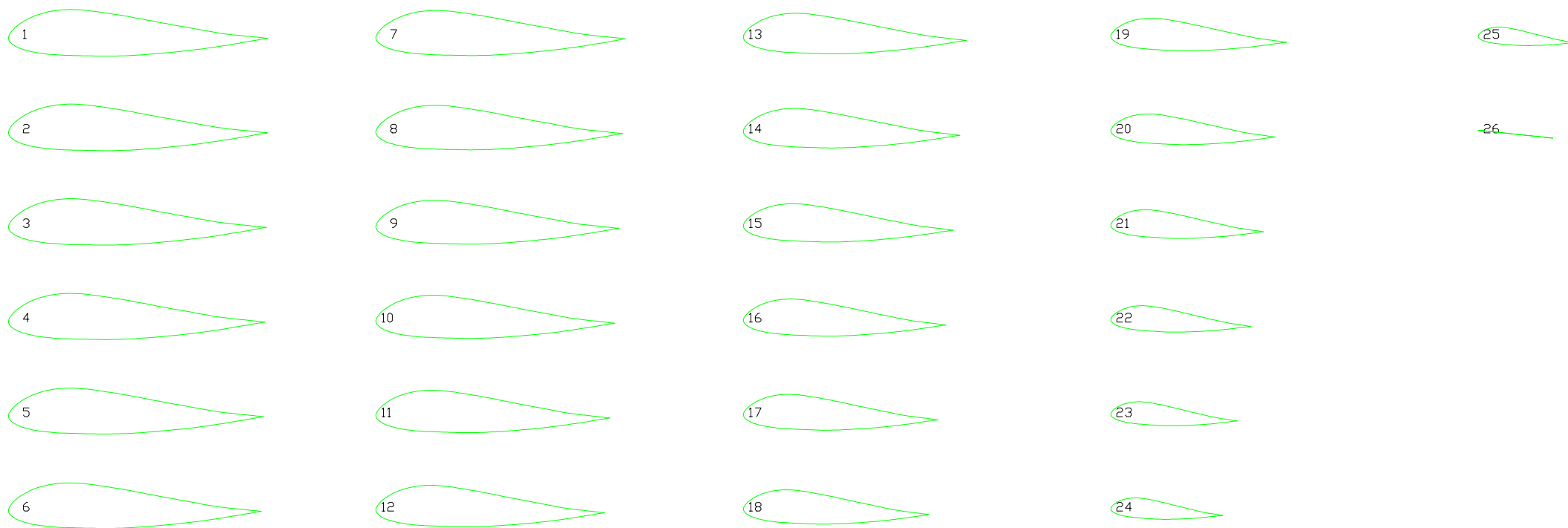
4-1 VAULT VIEW

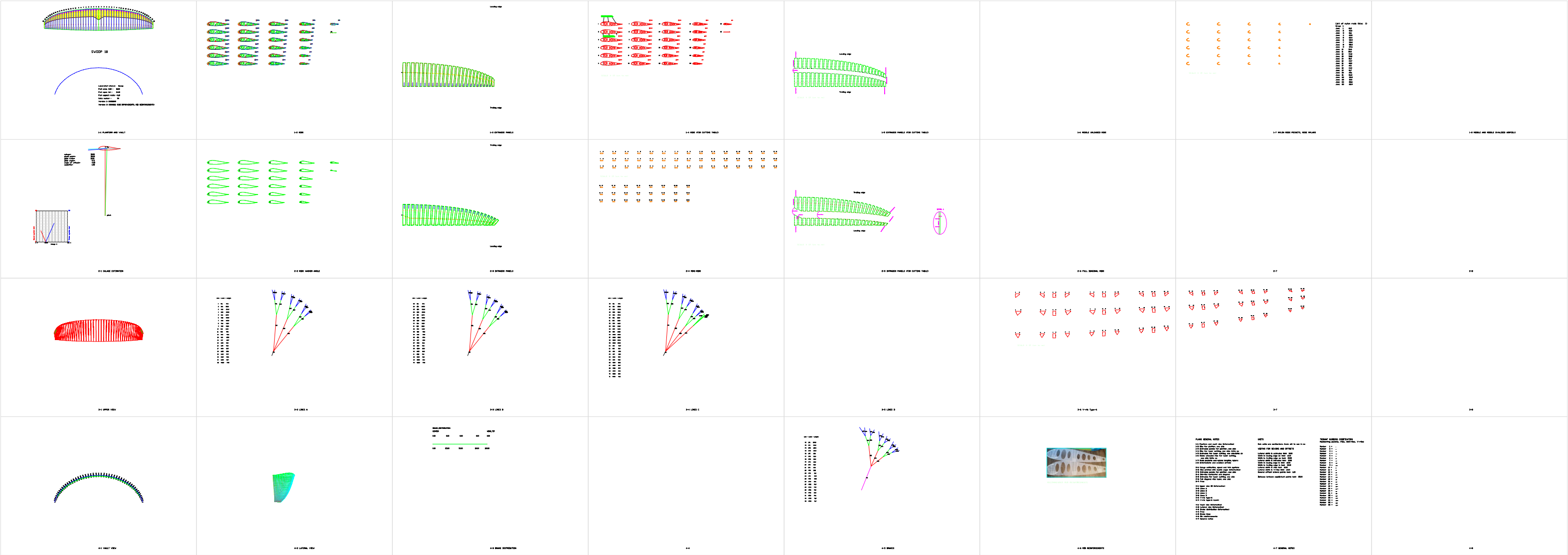


4-2 LATERAL VIEW

calage= 30.00
plumb point= 38.00
glide ratio= 10.00
glide angle= 5.71
angle of attack= 4.23
assiette= 1.48







PLANS GENERAL NOTES

- 1-1: Planform and vault view (informative)
- 1-2: Ribs for plotter, one side
- 1-3: Extrados panels for plotter, one side
- 1-4: Ribs for laser cutting, one side. Units cm
- 1-5: Extrados for laser cutting, one side.Units cm
- 1-6: Middle unloaded ribs for laser cutting,
one side Units cm
- 1-7: Rods pockets and nylons lengths, mylars
- 1-8: Intermediate and ovalized airfoils
- 2-1: Calage estimation, speed and trim systems
- 2-2: Ribs printed with washin angle (informative)
- 2-3: Intrados panels for plotter, one side
- 2-4: Mini-ribs horizontal and diagonal
- 2-5: Intrados for laser cutting, one side
- 2-6: Full diagonal ribs laser, one side
- 2-7: Free
- 3-1: Upper view 3D (informative)
- 3-2: Lines A
- 3-3: Lines B
- 3-4: Lines C
- 3-5: Lines D
- 3-6: V-rib type-6
- 3-7: V-rib type-6 (cont)
- 4-1: Vault view (informative)
- 4-2: Lateral view (informative)
- 4-3: Brake distribution (informative)
- 4-4: Free
- 4-5: Brake lines
- 4-6: Rib reinforcements
- 4-7: General notes

UNITS

Main units are centimeters. Scale x10 to use in mm

WIDTHS FOR SEWING AND OFFSETS

- Lateral width in extrados (mm): 10.00
- Width in leading edge ex (mm): 10.00
- Width in trailing edge ex (mm): 20.00
- Lateral width in intrados (mm): 10.00
- Width in leading edge in (mm): 10.00
- Width in trailing edge in (mm): 20.00
- Lateral width in ribs (mm): 10.00
- Lateral width in V-ribs (mm): 10.00
- General offset lateral points (mm): 1.20
- Distance between equidistant points (cm): 25.00

“ROMAN” NUMBERS CODIFICATION
Numbering panels, ribs, mini-ribs, V-ribs

- Number 1 =
- Number 2 =
- Number 3 =
- Number 4 =
- Number 5 =
- Number 6 =
- Number 7 =
- Number 8 =
- Number 9 =
- Number 10 =
- Number 11 =
- Number 12 =
- Number 13 =
- Number 14 =
- Number 15 =
- Number 16 =
- Number 17 =
- Number 18 =
- Number 19 =
- Number 20 =
- Number 21 =
- Number 22 =
- Number 23 =
- Number 24 =
- Number 25 =
- Number 26 =