## Formula Kite <br> 2024 Equipment Registration Cycle Kite Measurement Instructions

Kite measurements will be taken on both uninflated and inflated kites.
All measurements will be taken "flat", that means laid out on the floor with defined tension applied. Measurement processes widely follow similar procedures by FAI for paragliders.

Additional measurements may be agreed during the factory inspection depending on the design of the kite.

## Setup

a. Kite laid out flat on the floor, bottom side up.

b. Apply hooks on the bridle attachment points closest to each tip.
c. Connect hooks to a non-bending rod.

d. Fix the rod on one side on the ground.

e. Apply 5 kg load on the other side

f. Stretch out any obvious wrinkles and flatten the last cell on the tips if required.



## Nomenclature



Leech points are determined as per World Sailing Equipment Rules of Sailing (https://d7qh6ksdplczd.cloudfront.net/sailing/wp-content/uploads/2020/10/05151946/Equipment-Rules-of-Sailing-2021-2024.pdf) section G. 4

Measurements are usually taken along the rib closest to a sail leach point (i.e. chord, bridle attachment points etc).

Units: millimeter.

- Span is the perpendicular distance between the two outermost points on both tips of the kite.
- Chord is the perpendicular distance between the two outermost points on Leading Edge and Trailing Edge (measured at a defined rib)
- If there is a single center-cell (odd number of kite cells), the base is defined as the seam below the middle of the kite. The cell in the middle of the kite is numbered "Cell 0".
- If there is no single center-cell (even number of kite cells), the base is defined as the seam in the middle of the kite. The cell above the seam is numbered "Cell 1".
- Cells are numbered starting from the base upwards.
- Ribs are labelled based on the measurement point location on the Trailing Edge that is closes to that rib.
- Measurements between measurement points (and between measurement points and bridle attachment points) are taken point-to-point along the seam of the rib (shortest distance).
- Measurements on bridle attachment points are taken from the centre of the bridle attachment. If one bridle attachment point level has several loops, the distance of the center of each loop shall be recorded.


## Basic Registration Information per model/size

| Name of the model |  |
| :--- | :--- |
| Model year (as shown on the registered equipment list |  |
| Weight (in gram) |  |
| Nominal area (as printed on the outside of the kite) |  |
| True area (flat laid out area) |  |
| Number of cells |  |
| Price for MNAs / NCAs (ex factory, ex VAT, ex shipping, <br> in EUR) |  |
| Average recommended retail price (ex VAT, in EUR) |  |
| Monthly production capacity for this model / size |  |
| Average time from order to delivery to the end <br> customer (in weeks) |  |
| Warranty (in months) |  |
|  |  |

Data to be recorded (uninflated)

## Canopy

| Position | Rib from center | Measurement |
| :--- | :---: | :---: |
| Full Span | --- |  |
| CP-HP | --- |  |
| Chord - CP | -1 |  |
| Chord - QLP | Tbd |  |
| Chord - HLP | Tbd |  |
| Chord - TLP | Tbd |  |
| Chord - SLP | Tbd |  |
| Chord - AP | Tbd |  |

## Bridle Attachment Points

| Position | Rib from center | A | B | C | D |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Bridle - CP | Tbd |  |  |  |  |
| Bridle - QLP | Tbd |  |  |  |  |
| Bridle - HLP | Tbd |  |  |  |  |
| Bridle - TLP | Tbd |  |  |  |  |
| Bridle - SLP | Tbd |  |  |  |  |
| Bridle - AP | Tbd |  |  |  |  |

## Air Intakes

| Position from Center | Height | Width | Position from LE seam |
| :--- | :--- | :--- | :--- |
| Center (if applicable) |  |  |  |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |

Data to be recorded (inflated)

## Canopy

| Position | Rib from center | Measurement |
| :--- | :---: | :---: |
| Full Span | --- |  |
| CP-HP | --- |  |
| Chord - CP | -1 |  |
| Chord - QLP | Tbd |  |
| Chord - HLP | Tbd |  |
| Chord - TLP | Tbd |  |
| Chord - SLP | Tbd |  |
| Chord - AP | Tbd |  |

