V2.0 01/01/2024 1 of 10

VVP BELGIUM - WINGSUIT PROGRESSION OVERVIEW & LICENSES



(Photo by Casey Pruett)

This document contains information on the proposed VVP wingsuit progression licenses and experience grouping. These licenses are part of the updated basic safety regulation (Edition 2024) and are intended to improve wingsuit safety in all its aspects by providing VVP with a more structured progression guidance for novice wingsuit flyers from first flight course to more advanced dynamic or head down flying. It is the responsibility of the wingsuit instructors panel to ensure oversight of wingsuit flying framework, safety, usage of appropriate materials and correct experience level management. The final responsibility however lies with the jumper.

VVP supports safe and enjoyable skydives for all members. With wingsuit technological advances, opportunities to train in a wingsuit tunnel, evolving techniques for flying, it is recommended to have a more structured path to guide new wingsuit flyers and help with their progression in the fastest, and safest manner possible. This is a 'living document' meaning that it will be updated as new information, technology, procedures, tips, skills, tunnels, knowledge and experience evolve and become available for everyone's benefit. This progression guide is intended as a merit-based assessment to guide a wingsuit student's progression and assist his/her wingsuit coach with a recommended path of skills to learn.

Before dreams can come true and you embark on a first wingsuit flight course you need to have at least an FAI-C license followed by a first flight course. Meantime, tracking is not the only discipline to progress towards your wingsuit dream! The more skydives you log as well as experience you gain in any other disciplines will contribute to your capabilities to fly your body in different orientations, improve experience and recovery from instability in freefall, make you more familiar with your gear (including your canopy) and ultimately give you a stronger learning curve towards becoming a better wingsuit pilot. If you have never looked at the ground while skydiving and are not knowing what it means to fly a pattern you might want to postpone your first flight a bit and explore the depth of disciplines skydiving has to offer or you could opt to

V2.0 01/01/2024 2 of 10

get a glimpse of what it is like to experience true flight in an indoor wingsuit tunnel.

These proposed VVP wingsuit licenses (level A-F & initiator/instructor) and recommendations are deemed necessary for further improving the safety & quality of the discipline and will be updated when & where considered necessary by the wingsuit instructor panel.

Some general recommendations

- As a general rule, for every progression step, coached or solo flying is followed by 2-ways before embarking on larger multi-ways (step-by-step) or leading jumps.
- Gaining skills and experiences are generally preceded in small suits before switching to bigger suits.
- Progression jumps should no longer contain exercises below 6000 ft
- Progression jumps preferably are not done in tandem or AFF loads, when any canopies are opened
 at higher altitudes or require an experienced base to avoid unplanned encounters during the flight
 path.
- With every new level the coach will provide the student with ground training, pre-jump briefing, freefall guidance and after jump debriefing.

Despite the hunger of novice wingsuit jumpers to fly bigger wingsuits, 2-ways and smaller suits are the holy grail to best learn and fine-tuning movements when it comes to wingsuit Progression! Plan your jump, jump the plan and include a debrief to improve your learnings.

Wingsuit First Flight Course

A wingsuit First Flight Course (FFC) must be given by a VVP recognized wingsuit coach/initiator (see listing initiators VVP 2023) to a jumper holding an FAI-C license and the right equipment.

The FFC must be in accordance with the manufacturer's training method (eg, phoenix fly, intrudair, squirrel - more detailed VVP first flight instructions are being generated) and contain typically the following elements:

- Theory and material/gear knowledge
- Jump preparation
- Exit
- Navigation
- Practice pulls and deployment
- Freefall and canopy emergency procedures
- Assessment by the coach whether the FFC was successful (video proof)

Material

In addition to the mandatory materials in the BVR for all skydives, the following material is recommended for wingsuit jumps (see BVR and/or talk to a wingsuit instructor in case of questions regarding your material):

- Visual Altimeter (mudflap and/or on chest strap)
- Audible altimeter (consider a second audible or a VOG for increased altitude awareness)
- AAD (specific wingsuit AAD modes do exist for Cypres due to the lower fall rate however no longer manufactured, optional)
- Preferably a category 3, 7 cell / non-elliptical main canopy is recommended with a wingloading <1.4 when learning wingsuit (eg Atair Winx, spectre storm,...). First increase wing suit size before thinking of a smaller canopy and ensure on-heading openings!

V2.0 01/01/2024 3 of 10

• RSL / Skyhook -> Especially when one of your handles might go into your suit (which shouldn't be the case in the first place, see next point)

- Cutaway and Reserve handles should be in reach and not in any way covered by the wingsuit. A soft handle will have fewer problems than a metal D-handle and two-sided zippers on your wingsuit are better than one.
- Longer bridle (8 to 9 foot recommended due to bigger wake turbulence)
- Bigger pilot chute (at least 28', vented toroidal for decreased oscillations)
- Rig with Open wingsuit corners
- Cut-away arms
- ...

Use of the following equipment in combination with a wingsuit flight is **NOT ALLOWED**

- Pull-out pilot chute (ONLY BOC throw out pilot chutes are allowed)
- Collapsible pilot chutes based on a bungee/elastic
- (Older) rigs with the pilot chute mounted on the leg
- Mechanical AAD (FXC)
- Use of camera / GoPro during the recommended solo jumps and during the wingsuit progression program (WPP).

Using the following equipment in combination with a wingsuit flight is NOT RECOMMENDED and should be only considered for more advanced wingsuit and canopy pilots

• Smaller elliptical main canopies and higher wing loading (>1.4)

Experience level and suit size

The model of wingsuit flown must be in accordance with the level of experience of the jumper. Three different levels can generally be distinguished based on jump number as per manufacturer guidelines (see website Phoenix fly, Squirrel, Intrudair, ... for details or talk to a wingsuit instructor in case of questions).

- Rookie 0-75 wingsuit jumps (Armwing not below hips, legwing not below feet)
- Intermediate 75-200 wingsuit jumps (Armwing not below knees, legwing not below feet)
- Advanced 200+ wingsuit jumps (everything else)

Manufacturers might propose specific progression paths depending on the discipline practiced (freestyle, performance, formation).

In addition an up-to-date list of all available wingsuits per category can be found online at: https://paralog.net/ppc/suits.php or https://wingsuit.world/classification/

VVP however advocates for a skill-based progression towards bigger suits hence the proposed licensing!

Exit order and body position

Wingsuit is last in the exit order. Exceptions can be made for more advanced head down jumps in agreement with the load master which can be positioned in the beginning or middle of the jump run. 'Clear and pull' and other jumps with opening altitudes (¹) above 5000 feet should, for safety reasons, leave the aircraft before the wingsuits.

Upon exit, the wingsuit must remain collapsed by holding the arms and knees together until you are free from the aircraft. A "key" is given with a movement of the head (not arms) and a 30° exit direction should be adopted for group jumps in order to avoid potential collisions if someone has a funnel upon exit.

Navigation and opening

¹ Opening altitude = the altitude at which you are hanging under an open canopy)

V2.0 01/01/2024 4 of 10

We recommend that wingsuit jumps should be performed with knowledge of the prevailing dropzone, wind directions, jump run, clouds, other jumpers/wingsuit groups as well as the predetermined opening location. The flight direction in free fall must be determined before the start of the jump and is advised to be communicated to the pilot for awareness.

To avoid unintentional conflicts with other jumpers under canopy it is not allowed to fly in the jump run with a wingsuit. We call this the NO FLY ZONE.

Under no circumstances should a wingsuit come near open canopies during flight. Exceptions such as XRW can be made with the permission of the CTL on duty and appropriate briefing of the involved jumpers.

The first 25 wingsuit jumps may only be performed at a maximum of FEW (1-2/8) clouds, no towering clouds and a good ground view, if in doubt check with the wingsuit coaches, CTL and pilot. More experienced jumpers can fly at SCT clouds and therefore 4/8 ground view.

BKN or OVC (broken or overcast) sky is NO weather for horizontal movement or wingsuit flights! Exceptions can be made with permission from the CTL on duty in agreement with the wingsuit coaches and a WS-D license is applicable.

Opening altitude

After a successfully completed FFC it is recommended to do at least 3 to 10 solo wingsuit jumps to practice the newly learned skills.

For the first 25 wingsuit jumps, 4500 Ft is the recommended minimum opening altitude (due to possible additional stress factors such as unzipping legs and arms, potential line twists,...), and can then be phased lower gradually.

When progressing to bigger suits it is advised to increase the opening altitude (physical and mental margin) for the first few jumps and until you have consistent clean and on-heading openings.

It is the responsibility of the wingsuit pilot to determine the appropriate activation altitude to be under an open canopy at the respective altitude (hanging under canopy too high or too low).

Up to 100 wingsuit jumps a minimum altitude under an open canopy of 2700 ft is advised. When changing to a new or larger wingsuit model, an adjusted opening altitude is recommended. The maximum opening altitude is 5000 Ft, exceptions may be permitted after consultation with the CTL on duty.

Wingsuit Progression Program (WPP)

To promote basic skills and safety in wingsuit flying, it is recommended to make instructional coach jumps. This can be supported by the federation and the clubs through subsidies. These jumps may be supervised by the following people

- Wingsuit initiator / coach (VVP initiators 2024)
- Foreign wingsuit coaches with equivalent manufacturer or organization training level, with approval from VVP.

VVP initiators are designated by the VVP Safety Coordinator. This list will be published on www.valschermsport.be.

RECOMMENDED LICENSE GROUPING

- * If a jumper is not current or not a known wingsuit pilot within the club, a minimum of an FAI-C license is required with adherence to respective refresh regulations according to the BVR.
 - The jumper can also be asked to show/prove his/her experience level through videos or reference jumpers which needs to be validated or approved by a wingsuit instructor and CTL.
 - If not clear, a test jump might be required to assess experience level and a level will be allocated.
 - When experience level is not deemed sufficient for the respective suit, the jumper might not be granted

V2.0 01/01/2024 5 of 10

permission to jump in the respective suit or asked to jump a smaller suit at the PCV dropzones by the CTL.

- * Please note that different flyers might be less familiar with acro, dynamic or head-down flying and might have already progressed to a bigger suit. It is advised also to these jumpers to level-up in mastering the different skills of wingsuit flying and following the progression levels for the sake of improving safety and fun. If focus lies on performance, jump numbers of the manufacturer should be followed.
- * The more experienced wingsuiters in the group should keep an eye on and try to assess the level of participants and skill level for multi-way jumps.
 - It is the responsibility of the individual wingsuit pilot to fly safely, predictable and responsibly.
- * Wingsuit Tunnel experience can speed up skill development and level progression.

 However jump numbers are needed for building experience in (advanced) pattern flying and comfort with canopy openings before progressing to big suits and or dynamic jumps.
- * It is recommended that the student follows the sequential progression order of A F described below.
- * Levels beyond D (Dynamic and Head Down) are optional for the student to learn and it is highly encouraged to be briefed by an expert wingsuit coach qualified in the these areas

License	Title	Conditions/requirements to begin level training	Recommendation/permission after achieve this level
WS-A (FFC)	Wingsuit beginner	FAI-C license Gear check Briefing wingsuit first flight course FFC flying test jump with coach	Solo belly wingsuit Beginner suit Canopy wingload <1,4 No tandem - No AFF in load
WS-B	Wingsuit beginner BOSS	WS-A >10 WS solo jumps Briefing formation flying BOSS flying test jump with coach (see below)	up to 3-way belly wingsuit (No leading) Beginner suit Wingload <1,4 No tandem - No AFF in load unless experienced (WS-C or above) flyer is leading
WS-C	Wingsuit intermediate	WS-B >75 WS jumps Test jump with video (see below) Briefing transitions/backfly/barrel rolls	up to 7-way if you are on your belly up to 3 way if you are on your back Intermediate suit Wingload <1,4
WS-D	Wingsuit advanced	WS-C >200 WS jumps Test jump with video (see below) Briefing big ways (Briefing dynamic)	Bigway wingsuit formations (small dynamic groups with coach or dynamic leader E-level) Big suit
WS-E	Wingsuit dynamic	WS-D Test jump with video (see below) Briefing dynamic (Briefing head down)	Dynamic (2 way Head down with coach Big suit or head down leader F-level)

V2.0 01/01/2024 6 of 10

WS-F	Wingsuit head down	WS-E Briefing head down Test jump with video and approval coach (see below)	Head down Big suit
Instructor (approved by VVP)	WS instructor	WS D license instructor course (see manufacturer)	Approve license A-C
, ,	WS dynamic instructor	WS E license - 100 dynamic jumps + approval dynamic instructor	Approve license A-E
	WS head down instructor	WS F license - 100 head down jumps + approval head down instructor	Approve license A-F

^{*}Group sizes can be larger as listed here when more experienced wingsuit pilots (higher license level) join the jump. It is however to be noted that additional participants require an increased caution and could create distraction for the less experienced.

Recommendations wingsuit licenses and topics to cover during briefings and tests:

Wingsuit A - Beginner (= successful FFC course)

- Conditions:
 - FAI-C license
 - Gear check
 - Briefing wingsuit first flight course (FFC)
 - o FFC flying test jump with coach
- Briefing:
 - first flight course and safety
 - navigation
 - Gear knowledge (gear-up and prepare independently)
- <u>Target Learning objectives:</u> stable belly flying, stable exit, proper navigation, awareness on jump run/ line of flight, proper altitude, practice pulls, proper deployment signal and at correct altitude (Video proof mandatory)
- Recommendation/permission after achieve this level
 - Solo belly wingsuit
 - Beginner suit
 - Canopy wingload <1,4
 - No tandem No AFF in load

Wingsuit B - Beginner BOSS

- Conditions:
 - WS-A
 - >10 WS solo jumps
 - Briefing formation flying
 - BOSS flying test jump with coach (see below)
- Briefing:
 - o formation flying, Pattern, role of base and leading (or next to the base, no

V2.0 01/01/2024 7 of 10

- dive-bombing), separation (fan out),
- Exit types, sustained level flying, proper braking and acceleration, proper up/down controlled motion, proper side/side controlled motion, approach of a base, position, quadrants
- off-landings and what to do. What about Pop-outs in a wingsuit?
- NO 180°, dive upon break off! We like predictable smoothies
- YOU STICK WITH THE BASE! (whenever this is safe)
- These skills mandatory and allow a person to begin safely jumping with up to a total of 3 wingsuiters in a group

Target Learning Objectives

- **Jump 1:**The student follows the coach in a series of up and down movements.
- Jump 2: The student follows the coach during a series of braking and accelerating movements
- Jump 3:The student continues to fly relative next to the coach during a series of unplanned 3 dimensional movements.

• Recommendation/permission after achieve this level

- up to 3-way belly wingsuit (start with 2-way before moving to 3-ways, No leading)
- o Beginner suit
- Wingload <1,4
- No tandem No AFF in load unless experienced (WS-C or above) flyer is leading.
 (jumping with others creates additional distraction)

Wingsuit C - Intermediate

Conditions:

- WS-B
- >75 WS jumps
- Test jump with video (see below)
- Briefing transitions/backfly/barrel rolls

Briefing:

- Performance flying techniques to optimize speed/lift to maximize freefall time, distance, and/or speed, angle of attack during a wingsuit jump
- The student is explained the different techniques needed to achieve maximum freefall time, distance or forward speed during wingsuit flight and how to work with a flysight
- transitions, backfly and barrel rolls,
- The student is explained the techniques needed to make a barrel roll (a 360-degree rotation around the longitudinal axis) while maintaining heading and orientation.
- The student receives an explanation of the techniques required to make a backfly exit and transition during the jump, all while maintaining heading and orientation. The student must be accompanied during the jump by a leader who can determine the line of flight. For backfly solo jumps a maximum of 5 seconds of continuous flying on the back is allowed.
- How to lead a group (both in clouds and blue sky)
- Note: Have a look at the following wingsuit acro website which is great for exercises and plan some tunnel time at indoor wingsuit tunnel in Stockholm, Sweden.
 - flylikebrick.com
 - http://www.flylikebrick.com/safety-training.php

V2.0 01/01/2024 8 of 10

http://www.wingsuitcompetition.com/#

Target Learning Objectives:

- Random stable exit chosen by the coach (front, running, camerastep, ...)
- Flying belly slot , dock and around (video proof mandatory)
- Planning a jump

Recommendation/permission after achieve this level

- up to 7-way if you are on your belly (incrementally increase group size)
- o up to 3 way if you are on your back
- Intermediate suit
- Wingload <1,4

Wingsuit D - advanced

Conditions:

- WS-C
- >200 WS jumps
- Briefing big ways
- Test jump with video (see below)
- (Briefing dynamic)

Briefing:

- Big way formations attention points
- Importance of smooth and predictable flying
- the student receives instruction in the techniques required for relative back flight.
 Up and down, forward and backward in relation to the coach.
- Separations, what if base funnels?
- Why dynamic flying requires additional briefing
- Steep flying increases danger pop-outs!

Target learning objectives:

- Organize jump with others
- Proper technique for exits, barrel rolls, transitions from belly to back flying, transitions from back to belly flying, while maintaining proper navigation and altitude awareness + flying back fly slot and dock (video proof mandatory)

Recommendation/permission after achieve this level

- Bigway wingsuit formations
- Small group dynamic allowed with coach or level E holder when briefed by a coach
- o Big suit allowed but it is recommended to learn these skills in a smaller suit
- (Rodeo, Trapeze, XRW allowed upon specific briefing by experienced coach on the dangers (flat spins, entanglements, .)... For XRW always with coach, decision of group lies with coach and canopy pilot.)

Wingsuit E - dynamic

Conditions:

- WS-D
- Briefing dynamic
- Test jump with video proof mandatory (with coach or E level wingsuit pilot, see below)
- (Briefing head down)

V2.0 01/01/2024 9 of 10

Dynamic briefing

 The student receives a briefing on dynamic flying (steep turns, 270°, flairs, eagles, ...) and the dangers involved linked to situational awareness, flying out of the formation, high speeds, burbles, flight path and importance of an appropriate leader, increased orientation difficulties.

- It is important to not fly in the jump run area and plan navigation, especially if there are tandems or AFF jumpers on the load.
- The student must be accompanied during the jump by a coach or dynamic leader (E license) who can determine the line of flight.

<u>Target Learning objectives</u>

Slot flying 2 different dynamic jumps in a 3-way (combination of 3 moves)

• Recommendation/permission after achieve this level

- Dynamic jumps
 - Allowed to fly in bigger dynamic formations (caution exercised due to high speeds)
 - During complex jumps BE MINDFUL of YOUR BRAIN'S WORKING CAPACITY!
- (2 -way head down allowed at the end of the load with coach or level F holder when briefed by a coach)
- Big suit allowed but it is recommended to learn these skills in a smaller suit which can also lead to E license

Wingsuit F - head down

<u>Conditions:</u>

- WS-E
- Briefing head down
- >5 head down jumps with instructor
- Test jump with video proof mandatory (with coach or F level wingsuit pilot, see below)

Briefing head down

 Head down flying and involved dangers and not hearing audible. Importance on positioning within a load, ground visibility, exit, starting carve, break-off/separation and separation altitude, dangers, head down with FF or Belly etc.

• Target learning objectives:

Video left and right carve (video proof mandatory, initiating the carve)

Recommendation/permission after achieve this level

- head down, also with FF sitfly, tracing or belly flyers
 - start small before going to larger groups
- Combined dynamic, head down jumps allowed
- Big suit allowed but it is recommended to learn these skills in a smaller suit which can also lead to E license

Wingsuit Initiator/Instructor requirements (mandatory)

- ♦ WS Initiator/FFC
 - → >200 WS jumps
 - ♦ WS D license
 - ◆ Instructor course (see manufacturer intrudair, phoenix fly, ...) and supervised coaching jump + film 1 jump

V2.0 01/01/2024 10 of 10

- ♦ WS Dynamic Instructor
 - WS E license
 - → >100 dynamic WS jumps
 - ◆ Approved coaching jump by dynamic instructor (see listing VVP 2024)
- WS Head Down Instructor
 - ♦ WS F license
 - → >100 head down WS jumps
 - ◆ Approval coaching jump by head down instructor (see listing VVP 2024)

CURRENCY Recommendations

- The currency model follows the general BVR recommendations for skydiving. If a WS jumper with a wingsuit A or B license has a break longer than 6-months, it is recommended that he/she receive a refresh explanation of WS instructor. If a >C license holder has a break longer than 2 year and the jumper has the ambition to wingsuit again a refresh explanation of a WS instructor is required and at least 1 wingsuit jump is to be performed in a student suit.

Other suggestions for discussion topics - to discuss with instructors

- ♦ Advanced load organizing with wingsuit groups
- ◆ Advanced flight patterns (other than U turns)
- Pop-outs
- Break-offs
- Collisions
- ♦ Flying smooth and predictable
- Leading jumps and responsibility
- *****

Additional interesting links

- https://squirrel.ws/learn/wingsuit-progression-1-your-ffc
- https://squirrel.ws/learn/wingsuit-progression-2-exit-order
- https://squirrel.ws/learn/wingsuit-progression-3-the-skydive
- https://squirrel.ws/learn/wingsuit-progression-4-making-it-back-alive
- https://www.skydivemag.com/new/wingsuit-collisions/?fbclid=lwAR3kwjLzFhhz7TeapOjOsYVttJbCcgNc5hoPw2Ecdy7Fl87H8muii4cqiTl
- flylikebrick.com
- http://www.flylikebrick.com/safety-training.php
- http://www.wingsuitcompetition.com/#
- https://www.skydivemag.com/new/which-wingsuit/