

Snowboard and Freestyle Ski FIS World Cup

Halfpipe (HP) Venue Requirements

HP Building principles

The preparation of the HP is a key point and has to be taken care of from the beginning to the end. It will provide long and performing Training and Competition sessions with a high number of riders. The main goal is to create consistent and packed snow conditions from the bottom of both walls to the top, as well as through there depth. Experts must be involved.

The Ideal snow type to use during preparation, accumulation and construction of the walls is dryer man-made snow. This avoids, whilst pushing snow, the formation of chunks, wet balls, air pockets, changes of consistency and type all through the length of the walls, as well as in there depths. In case of snowfalls during the construction procedures, the new snow has to be moved around, mixed or removed.

The decks have to be at the same height and length (laser systems can be useful). Copings have to be straight and parallel to each other.

The depth of the walls has to be enough to go through all training and competition days without risking touching ground and still having a good margin > 1 meter.

The flat has to have a round shape in order to not create unexpected bumps and changes of pitches.

Measurements for World Cup standard

- Height of walls: 22ft wall = 6.7 meters
- Pitch of Halfpipe measured through fall line of the flat: $18^{\circ} \pm 1^{\circ}$
- Length of ridable wall >150 meters
- Width from coping to coping 19-21m. (tighter if less steep, wider if steeper)
- Depth of snow in the bottom of the pipe > 50cm
- Width of decks minimum 8 meters

Further details and specifications can be found in the Technical Information for Halfpipe Construction.

Preparations - Staff / Material	# of People
2 snow-cats for around 10-15 days (including competition days) 1 with HP-preparation machine (with winch) 1/ 2 to push out the snow for the flat	2 snow cat driver – no regular snow cat shift
A FIS approved 22Ft HP grooming (finishing) machine is required at all WC venues (and spare parts)	1 Experienced HP Shaper
Shapers/Builders – needed during HP building (approx. 3-4 days) not competition days.	6 with shovels, chain saw, rope (to mark a straight coping line)

Training days (2) - Staff / Material	# of People
Technical HP needs	
2 snow-cats 1 HP-preparation machine incl. winch 1 to push out the snow for the flat (early – depending on weather, etc.)	1-2 snow cat driver – no regular snow cat Shift
1 snow cat with blower to remove new snow (suggested not required)	
3 x 20 litre color pumps (blue) + 1 small red color	3 skilled skiers with twin tips.
Chemicals 200kg at least with park monkey, buckets (the amount depend on what kind of chemical is provided !!)	3 knowledged people in using chemicals
Course Maintenance	6 with shaping tools (snowpark rakes shovels and crampons), hand snowblower (2)
Training - Competition	
Starter	1
Chief of Competition/HP (in Jury)	1
Slippers	15 experienced skiers minimum (ideally 10 skiers and 5 snowboarders)
Security – Crowd Control	2 each side of the decks
Exit-Gate control	1
Drinking water	Hot tea and cold water (without gas) during training and competition for competitors.

Communication Radio's (wired headset for start)	OC provides radios to run qualification (number and allocation according to FIS radio list). OC needs extra radios for internal communication.
Medical	
Medical Person - (Emergency) Doctor	1 minimum always at start—either on skis or skidoo (experienced in Advanced Live Support – ALS)
- Ski Patrol	4 two groups of 2 nurses/first aid staff with sledge (1 crew if needed leaves, 1 stays still at start, trained in Advanced Cardiac Live Support/ Advanced Live Support
1 skidoo	1 Dedicated driver
Building Crew (separate Crew)	4-6 to help building TV-platforms, etc.
Miscellaneous Staff – fence	2 control fence is in place
Skidoos incl. Driver (whole day)	1-2 depending on lift-situation
Judges stand and Data building responsible	1

Competition days (Qualifications Semifinals, Finals) Staff / Material:	# of People
Technical HP needs	
2 snow-cats 1 HP-preparation machine incl. winch 1 to push out the snow for the flat (early – depending on weather, etc.)	1-2 snow cat driver – no regular snow cat shift
snow blower to remove new snow (suggested not required)	1
3 x 20 litre color pumps (blue) + 1 small red	3 skilled skiers with twin tips
Chemicals 200kg at least with park monkey, buckets	3 knowledged people in using chemicals
Course Maintenance	7 with shaping tools
Training - competition	
Starter	1
Assistant Starter	1
Chief of Competition/HP (in Jury)	1
Scores/Results Board - Finish	2 to write down times/ranks—radios OC
- Start	1 to write down times/ranks-radios OC
Slippers	15 experienced skiers minimum (ideally 10 skiers and 5 snowboarders)
Runner	2 1 copy for results, 1 for press
Exit-Gate control	1

Accreditation control	4-6	around the finish area – depending on different zones and spectators
Security – Crowd Control	2	each side of the decks
Exit-Gate control	1	
Doping Control	12	6 women and 6 men (chaperones) only for finals
Skidoos	3	for taking riders back to start during finals if adequate lift not available
Drinking water		Hot tea and cold water (without gas) during training and competition for competitors.
Communication Radio's (headset for start) OC needs extra radios for internal communication.		OC provides radios to run the competition (according to FIS radio list).
Medical		
Medical Person - (Emergency) Doctor	1	minimum always at start (2 during TV live competition – either on skis or skidoo, experienced in Advanced Live Support – ALS)
- Ski Patrol	5	two groups of 2 first aid staff with sledge (1 crew if needed leaves, 1 stays still at start, trained in Advanced Cardiac Live Support/ Advanced Live Support)
1 skidoo	1	Dedicated driver
Infrastructure		
Building Crew (separate Crew)	4-6	to help building TV-platforms, etc.
Miscellaneous Staff – fence	2	control fence is in place
Skidoos incl. Driver (whole day)	1-2	depending on lift-situation
Judges stand and Data building responsible	1	

HP Infrastructure needs

Fencing / Padding	1 meter high (C fence) crowd control metal fence – in special cases only crowd control fence (each side of the pipe) top to bottom incl. start/finish area, set at 3 meters from coping (edge of pipe). Banner fence (sponsor banners) set at 2.5 meters from coping. Other safety nets and padding (TV-towers, etc.) as per required by race jury.
Judges Stand	Out of scaffolding (7,5 x 2,5 meters) or Container (7,5 x 2,5 meters) and min 2 meters inside height – completely closed (on three sides) and water resistant – with tables and chairs for 8 people – aligned to the center of the pipe around 20-25 meters behind the finish-line. Heaters and power for computer (separate electric circuit) are required.

Job descriptions (summary, for complete description see ICR: § 2001)

Chief of Competition	The Chief of Competition supervises the work of all course officials; summons the meetings of the competition committee for consideration of technical questions.
Chief of Halfpipe	Is responsible for all technical aspects and working procedures on the field of play in direct contact with slippers, color crew, maintenance crew
Starter	Has to be available at the start 30 minutes prior every official moment and opens and closes the hp according to needs. Controls the start zone and the flow of the riders. During qualifications, semi-finals and finals he is in radio contact with the jury. Gives the final start signal to the competitors after the confirmation by the Head Judge, TV and Race Director.
Assistant Starter	Has to be available at the start 30 minutes prior every official moment and assists the starter in his duties as well as pre calling and lining up the athletes according to the start order.
Runners	Have to be available during competition moments in order to collect from data staff results and distribute them on the course (start, Race director, official notice boards), TV, press compounds.
Slippers	Have to be available at least 2 hours prior official training moments and during the whole execution of the event. They will follow the instructions of the chief of HP, Race Director or technical advisor.
Maintenance	Crew dedicate in taking specific care of the Hp during all moments with assisting the technical advisor or chief of HP.
Color Crew	They will be available at least 90 minutes prior and during all official moments have to color pipe according to needs and instructions of chief of HP.
Exit gate control	During competition moments has to be located at the exit gate and control that nobody gets in to the arrival area and holds and directs riders in front of back drop for TV shots when needed.

Accreditation control	Control the designated areas and the access to them through accreditation identification.
Security control / crowd control	Stay in the filed of play and make sure that non authorised people do not get in and in case direct them out of the area.
Doping control	Chaperones have to manage and control the designated athletes for doping control and to accompany them to the doping control facility.
Score Board writers	Have to write done the scores on official notice boards both at start and finish area
Award team	It sets up the awards ceremony and together with OC runs them

Agreed by: _____ Date: _____
 Resort/OC Representative

Agreed by: _____ Date: _____
 FIS Inspector