



HANDBOOK 3

Race Tips for the ski racer

Your first sessions on snow

"What is a Ski Race"

- section 3 from the Level One Officials Handbook

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Your first sessions on snow.

As a member of Masters you may have already been on snow this year and are looking forward to that first night out training after a long season away from the snow. I know that I am. If you haven't been skiing yet don't sweat it or try to do too much technically your first few sessions. Real ski improvement starts with a retraining effort to get the muscle memory back in sync. If you've made any equipment changes this year it's also time to adjust to the new capabilities of your equipment. It's not the time to try to learn any drastically new techniques or tactics until you've established a solid dependable relationship with the platform under foot and have limbered up to allow your body to balance better. Getting back your ski legs is not quite as simple as riding a bike but it doesn't have to be too complicated either. It's important to get back in touch with the simple turn shapes that your skis can produce with minimal effort so that you can begin to refine and adapt them to more varied conditions later.

Here are some simple words of advice for Master's racers. We often don't give the training or preparation of our bodies the same emphasis that we place on selecting our ski equipment or trying to understand the technical aspect of the sport that we know we should. It's a little like driving a car on a race course and expecting it to perform because we have new tires on it but we don't ever maintain the engine. Your body is that engine and your equipment are just the tires.

Three simple things that you can do prior to learning anything physical like training or racing:

- 1) Take in the proper amount of fluid (water or specific sports drink) before skiing. Stay hydrated. Bring water out with you onto the hill whenever you ski. Bring some quick energy supplements as well to eat during the sessions.
- 2) Before your first run down the hill do some of the simpler stretching exercises that you can do on snow with your skis on or off. Make sure that you warm up the muscles first (not the same thing as being warm on the outside). Learning to ski well demands flexibility both to allow the muscles to respond appropriately and to avoid injury. If you're tight it's tough.
- 3) Clear your mind of all your worries and cares from the day. You're here to have fun too. Learning is much easier when you start out relaxed. Focus and intensity is something that you want to add to heighten your experience but most skiers need to start from a lower basis point and then raise the expectation gradually.

CONTINUED THIS YEAR:

FITNESS AND FUN: One of the changes that you will see in the program this year from the coaches is a proper attention to warm up and cool down. This is a key component of getting the most value from your session. of time and it is not the same as taking a few "warm up" runs). How many times have you raced to the hill from home, thrown on your skis and jumped straight onto the hill? Not only is this ineffective for you to learn anything physically or mentally it can also be quite dangerous. The one component of fitness that absolutely declines from the moment when we are born is suppleness (flexibility while moving).

GOAL SETTING: I am constantly reminded that regardless of what your goals and aspirations are with Masters, improvement at every level is just a matter of application of effort and the assistance of others. What you put in will equal what you get out of it. The coaches at Masters are here to help you realise your goals. Just let us know what they are. To help us know what these are there is a new tool we will be using this year that you have been asked to fill in called the Goals for Growth. Please bring this with you your first session so that we can incorporate this into the program. The form is also available online in Coach's Corner under Forms.

DECISION TRAINING: Good coaches have always included training the skier to understand and think for themselves while learning to ski better. Ski racing in particular often requires the skier to make instant adjustments to an initial plan as they progress down the course. This is more than just a style of coaching, it is a technique and we will be using this more often than in the past.

See you on the slopes,
Glenn Allen, Head Coach

3 WHAT IS AN ALPINE SKI RACE?

Any ski race is a competition in which racers ski through a set course and the time they take is recorded. The winner is the racer who has the shortest time to correctly pass through the course.

This statement belies the organization and experience needed to stage most races but the principle is the same for all – the fastest racer with the correct passage wins.

For all races, there are three principle groups of Officials on the course necessary to conduct a race . **At the start:** Officials must be able to accurately time when a competitor leaves the start and ensure that it is done according to the rules.

Along the course: Officials must ensure each competitor correctly passes through the gates and the course is properly set up and maintained.

At the finish: Officials must accurately record the time of the finish for each competitor and ensure it is done according to the rules.

Other essentials, common to all races include:

That the course is prepared and the track is laid out in advance of the competition.

There must be competent personnel to do all the documentation prior to the race and produce the results.

3.1 TYPES OF RACES

Alpine racing has six main types of events:

- Slalom
- Giant Slalom
- Downhill
- Super G.
- Super Combined
- Kinder Kombi

In addition, there are variations of Slalom events such as parallel events

Relative course layouts and technical criteria of are outlined on the following pages:

3.1.1 Slalom (SL)

In Slalom, the competitor must follow a tight course defined by pairs of single flagged poles called “gates”. A slalom race is normally held on a fairly short but steep hill. Racing is mostly down the fall line. The most important types of gates and combinations of gates are: open gates, closed vertical gates, vertical combinations, hairpin-combinations and delay turns. The gates are narrow (4 to 6 meters in width). The distance between gates within combinations (hairpin & vertical) may not be less than 0.75 m. The distance from turning pole to turning pole of successive open or closed gates may not be less than 6 m, not more than 13m with the exception for Children I and II ~ not more than 12m. Delay turns must have a minimum distance of 12 m and a maximum distance of 18 m from turning pole to turning pole.

Considerable turning skills are required by the competitor to safely negotiate the course. A slalom course must contain horizontal (open) and vertical (closed) gates as well as a minimum of one and maximum of three vertical combinations consisting of three or four gates, at least three hairpin combinations and should contain a minimum of one and maximum of three delay turns.

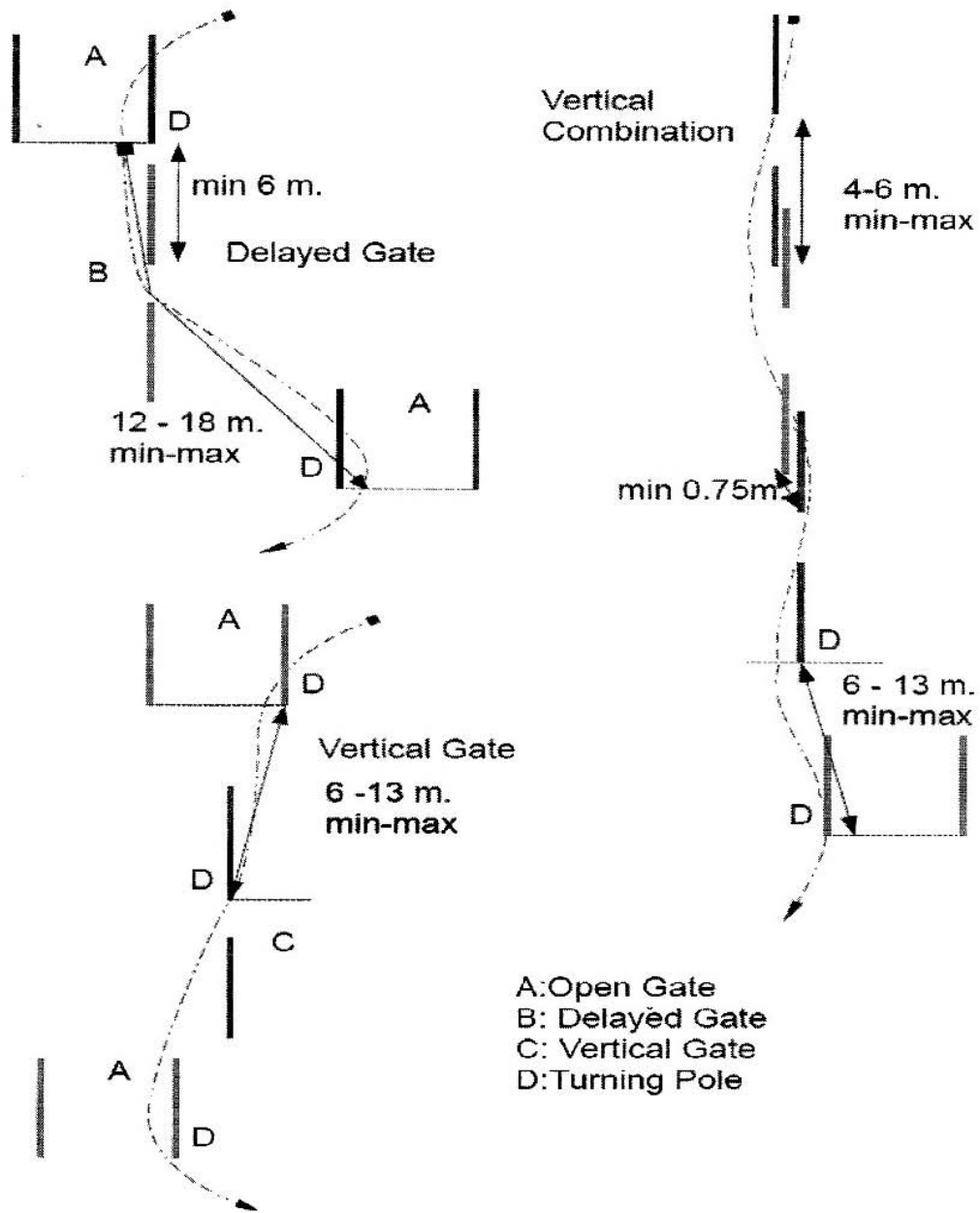
A good slalom course allows a racer to combine speed and a wide variety of technical skills and ski technique.

The typical slalom gate combinations are illustrated on the following page:

3.1.2 Super Combined (SC)

Is a FIS competition that consists of a DH or a SG race and if possible a one run SL on the same day. The courses and gates follow the FIS rules. The finish results of the DH or SG are reversed for the SL start order.

Slalom Course setting - Art. 803



4 TO 6M

WOMEN 120 TO 200M FIS, NOR-AM 140 TO 220M OG, WC # OF GATES 30% -35% OF VD +/-3 DIRECTION CHANGES

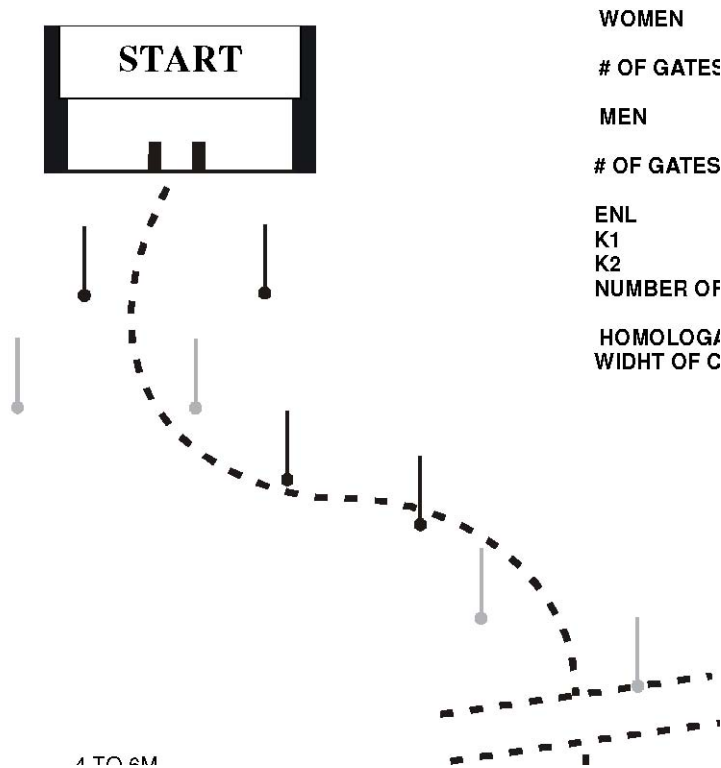
MEN 140 TO 220M FIS, NOR-AM 180 TO 220M OG, WC # OF GATES 30% -35% OF VD +/-3 DIRECTION CHANGES

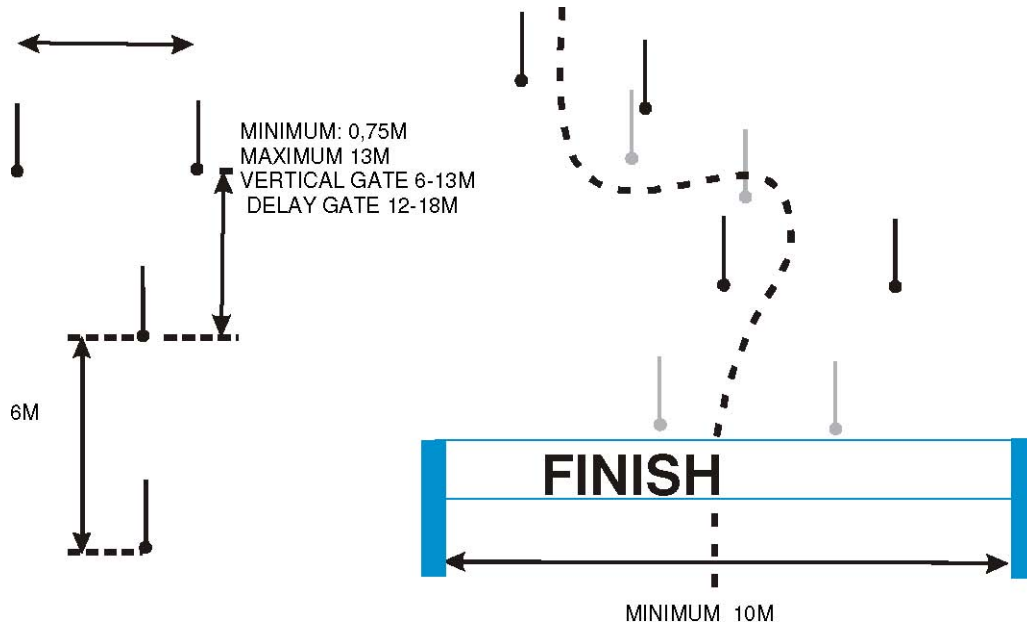
ENL 80 – 140 M
K1 MAXIMUM VERTICAL 120 m
K2 MAXIMUM VERTICAL 160 m

NUMBER OF DIRECTION CHANGES: 30 – 35% +/-3

HOMOLOGATION: 10 YEARS WIDHT OF COURSE: 40M FOR 2 COURSES

FIGURE 3.2 - THE SLALOM





MINIMUM: 0,75M MAXIMUM 13M VERTICAL GATE 6-13M

DELAY GATE 12-18M

4 TO 6M

3.1.3 Downhill (DH)

In this competition, the racer must demonstrate excellent skiing technique, agility, concentration, marked endurance and physical fitness as well as courage at high speed. The downhill course is the longest in alpine skiing competitions. The vertical drop varies from 500 m to 1100 m., the terrain is varied and the gates are set to control and to direct the racer instead of demanding turning techniques. There are no gate combinations and the gates are wide and open to the racing line. Thus, speed is significant and safety measures must be taken to ensure the racer is protected in case of a fall. Training runs are obligatory before the competition. Figure 3.3 illustrates a typical downhill course

3.1.4 Giant Slalom (GS)

This is a race event combining both slalom and downhill characteristics. The course is moderately long and preferably undulating and hilly with a vertical drop between 250 to 400 m. Turns are a variety of long, medium and short turns set considerably faster than Slalom but still not approaching the speed of Downhill. The gates are set further apart than in Slalom but are needed to control the speed as well as to demonstrate the turning skills of the racer. The gates in Giant Slalom are double-pole gates, as in the Downhill, however with smaller flags and alternating colors between blue and red. Figure 3.4 illustrates a Giant Slalom course.

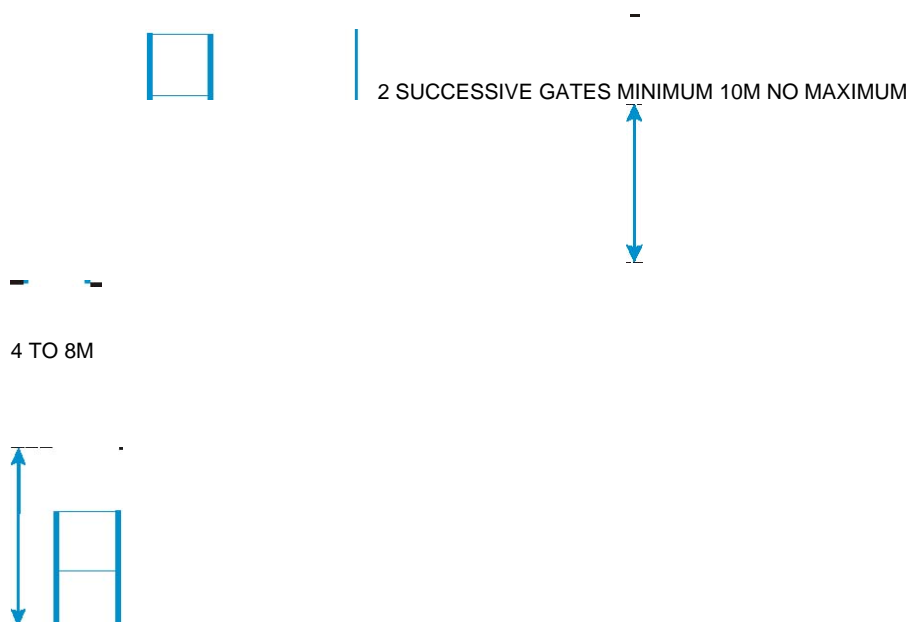
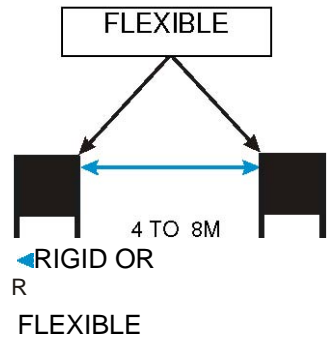
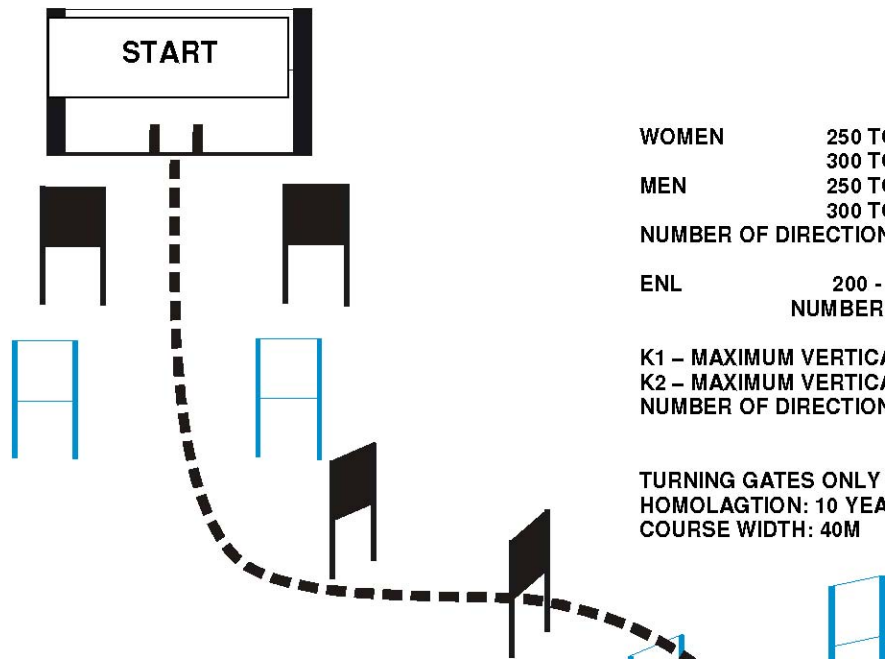
3.1.5 Super G (SG)

Super G derives its name from Super Giant Slalom implying that the course is both longer and faster than the regular giant slalom. Speed in some straighter stretches of the course may equal those of Downhill speed. The gates are set so they require more turning technical skills than in the Downhill but less than in the Giant Slalom. The Super G is a hybrid between Downhill and Giant Slalom. Because the speeds reached are high, the course is often traced on a course used for Downhill; however with a lower start position because the necessary installations to ensure the racers safety are the same. Flags alternate red and blue in color Figure 3.5 illustrates a Super G course.

3.1.6 Kinder Kombi (KK)

This non-FIS race event combining Slalom, Stubbies, Giant Slalom and Super G characteristics was created for the K1 program. The course should test the skier's ability to react and adapt to an ever changing rhythm and radius, but be designed to allow the competitors smooth transition between the various sections of gates. The course should flow from SL sections into GS sections using GS flushes, SL flushes, round turns, increasing radius turns, SG turns, tucking sections where applicable. The entire slope and natural terrain should be utilized and skiing as often as possible across the fall line is recommended. It is not recommended to use vertical combinations for SL flushes. Gates which impose on competitors too sudden or sharp braking should be avoided. The first few gates and last few gates should lead the skier comfortably. Figure 3.6 illustrates a Kinder Kombi course.

FIGURE 3.4 – GIANT SLALOM



WOMEN 250 TO 400M FIS,NOR-AM
300 TO 400M OG, WC
MEN 250 TO 450M FIS, NOR-AM
300 TO 450M OG, WC

NUMBER OF DIRECTION CHANGES: 11 TO 15% OF VERTICAL

ENL 200 -250 M NUMBER NUMBER OF DIRECTION CHANGES – 13-15%

K1 – MAXIMUM VERTICAL – 250 M K2 – MAXIMUM VERTICAL – 300 M NUMBER
OF DIRECTION CHANGES 13 – 15% OF VERTICAL

TURNING GATES ONLY ARE COUNTED HOMOLAGTION: 10 YEARS COURSE
WIDTH: 40M

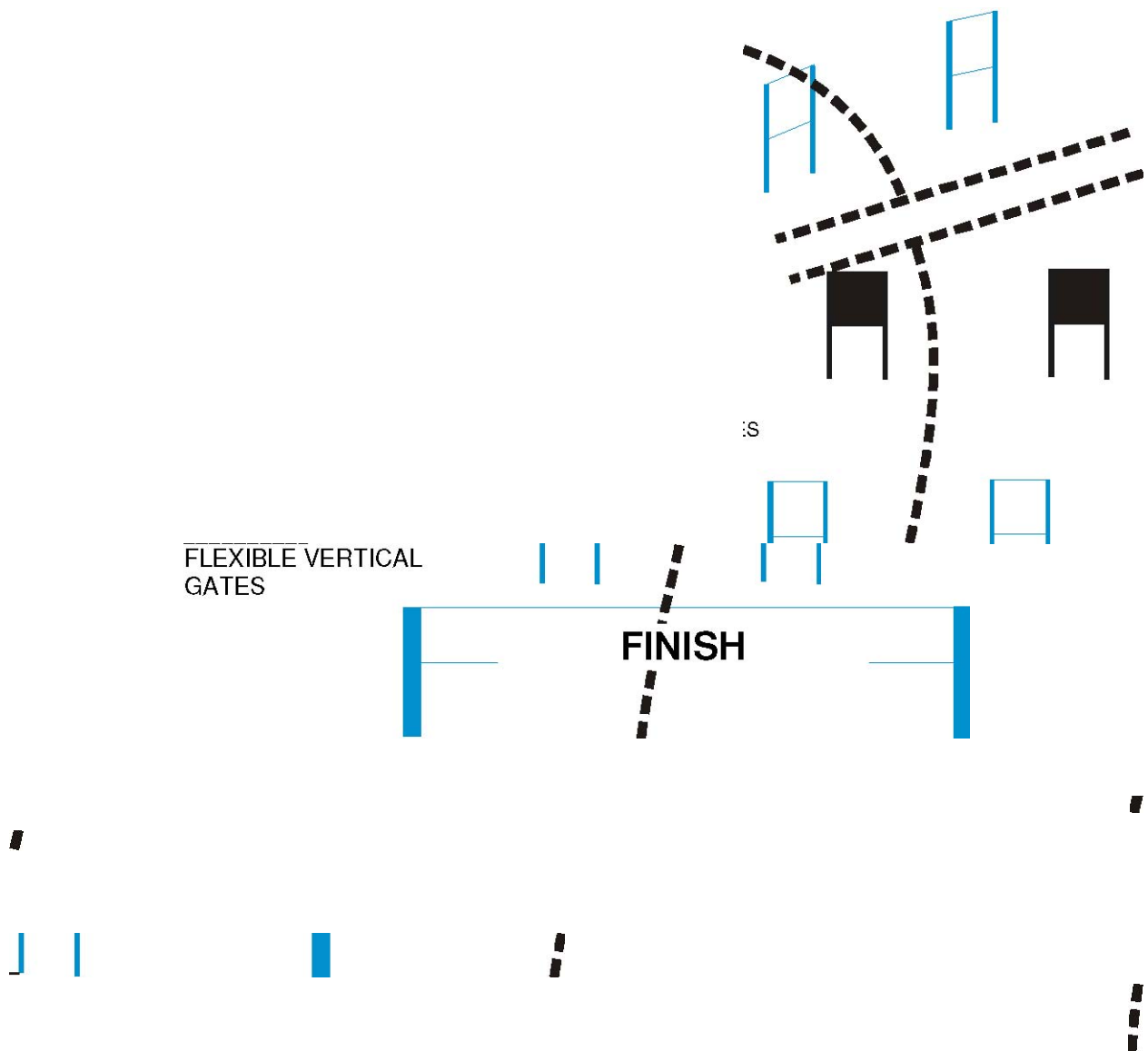
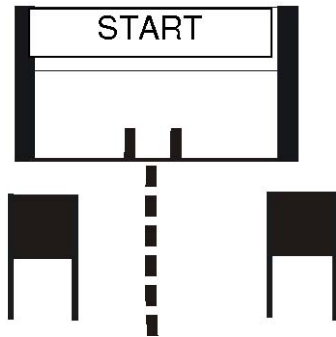


FIGURE 3.5 – SUPER G



WOMEN 350 TO 600M FIS, NOR-AM
400 TO 600M OG, WC

MINIMUM OF DIRECTION CHANGES: 30

MAXIMUM: 10%

MEN 400 TO 650M

**MINIMUM OF DIRECTION CHANGES:
IFVD<500–32 IFVD>500-35 MAXIMUM 10% ENL 350 TO 500 M
DIRECTION CHANGES MAXIMUM 10%**

K1 – VERTICAL MIN – 225M ~ MAX-350M

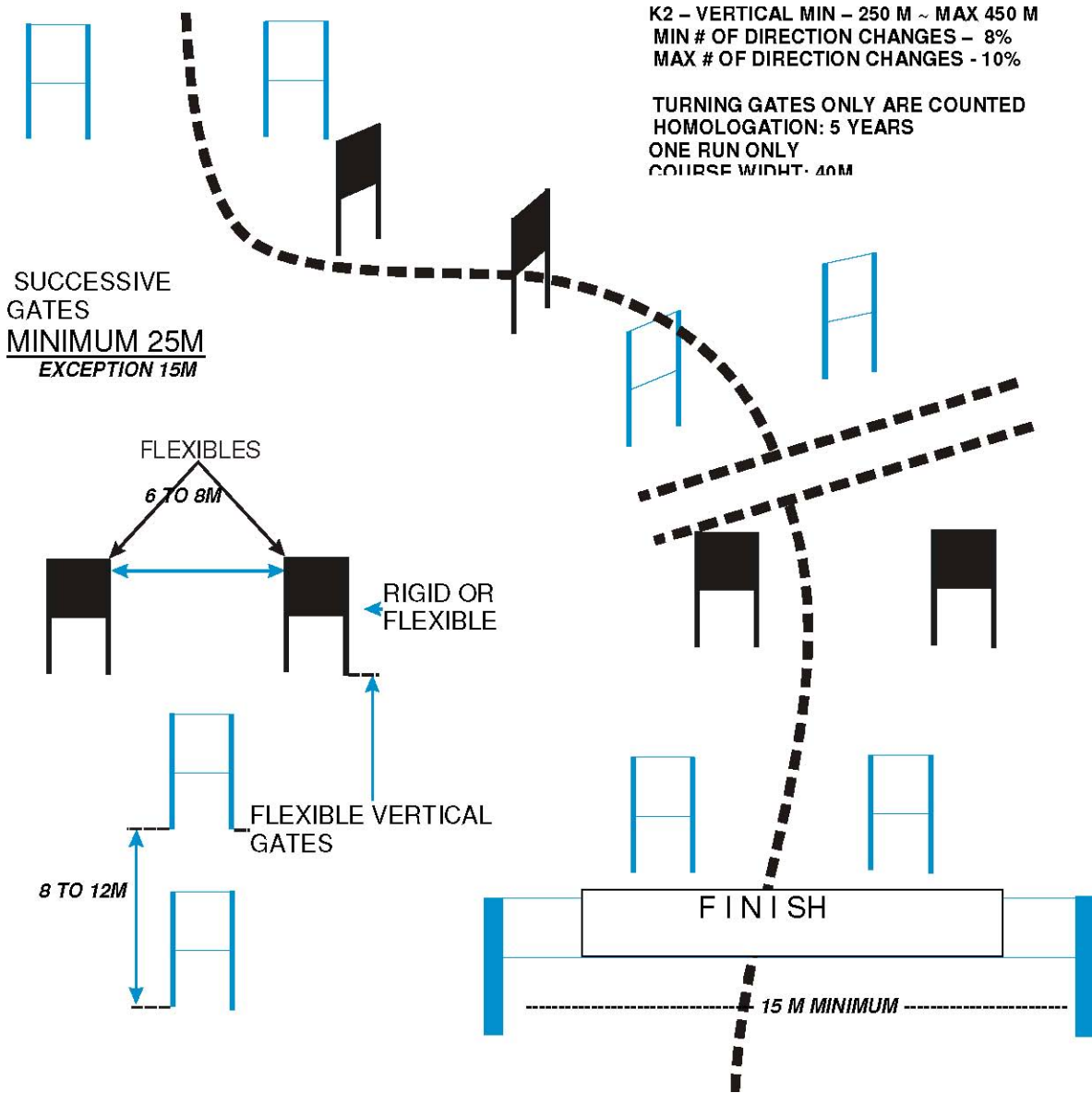


FIGURE 3.6 – KINDER KOMBI

