



Skating checklist

Offset

- ✓ Both poles are planted and new gliding ski touches snow at the same time.
- ✓ Double Pole-type motion on the lead side with staggered pole placement.
- ✓ Knee and hip are driven up the hill and are aligned over the gliding ski.
- ✓ Ankle, knee and hip joints are flexed as required by terrain.
- ✓ Maximum leg pushes on each side resulting in full extension of the pushing leg.
- ✓ At the completion of the leg push, the ski is raised slightly off the snow. The tip and tail of the ski leave the snow at the same time.
- ✓ Follow-through of the arms and hands is short, and generally stops at or just past the hips.

One Skate

- ✓ The skier plants the poles (two points) when the legs are closest.
- ✓ The skier assumes a “high” position for the initiation of each Double Pole.
- ✓ The Double Pole action and the leg push are completed almost simultaneously as the skier’s weight shift to the gliding ski is completed.
- ✓ The quicker the tempo (depending on race context, terrain, etc), the shorter the follow-through of the arms; generally stops just past the hips.
- ✓ During the recovery of each leg, the foot passes underneath the hip of that side (feet come close together).
- ✓ Maximum leg push on each side resulting in full extension of the pushing leg.

Two Skate

- ✓ Timing is the same as for One Skate, with poles being planted when weight shift is initiated.
- ✓ The skier assumes a “high” position for the initiation of the Double Pole on the poling side – hips are high, legs relatively straight, upper body is erect with slight forward lean.
- ✓ Body compression results in a lowering of the body by the end of the poling motion (more than for one skate because of faster speed and longer glide phase).
- ✓ The follow-through of the arms and hands is longer than for One Skate because of two leg pushes for one poling motion (arms usually fully extended back).
- ✓ During the recovery of each leg, the foot passes underneath the hip of that side (feet come fairly close together).
- ✓ Maximum leg push on each side resulting in full extension of the pushing leg.

Free Skate

- ✓ The skier remains low with pronounced flexion at knees and ankles.
- ✓ The skier maintains good balance and makes a complete weight shift from ski to ski (weight fully shifted onto gliding ski at the end of leg push)
- ✓ The skier may swing arms from side to side to increase power with each leg push or remain in a tuck position (depending on speed, wind resistance and racing context).
- ✓ Full controlled weight shift requires that the center of gravity be over the gliding ski right from the start of the leg push.
- ✓ Maximum leg push on each side resulting in full extension of the pushing leg.



Classic checklist

Diagonal Stride

- ✓ The skier commits weight fully to the gliding/supporting ski in the gliding phases.
- ✓ The glide leg is extended just before becoming the pushing leg to generate a powerful pre-loading motion.
- ✓ The middle of hips is over toes at initiation of leg push.
- ✓ Forward body lean comes from a flexed ankle.
- ✓ Complete extension of the leg and arm at the end of their respective pushes.
- ✓ Straight line through the upper body and leg as the push leg leaves the snow.
- ✓ The shoulder reaches forward on pole plant, hands at or below shoulder height.

Double Pole

- ✓ The hips, upper body and arms are well forward and high to load the poles on pole plant (poles are planted in front of the bindings).
- ✓ The skier pulls down on the poles, engaging the back, shoulder, core and arm muscles.
- ✓ Legs are slightly flexed on pole plant, with flex increasing noticeably – but not excessively – during the poling action.
- ✓ Upper body compression ends before the horizontal position.
- ✓ At pole plant, the shafts are nearly vertical, with grips slightly ahead of pole tips to allow for lag time before applying significant force onto the poles.
- ✓ Poles are planted parallel to each other and at shoulder width for maximal power transfer into poles (straight back and down).

One-Step Double Pole

- ✓ As the kick is initiated, the push leg is fully weighted with weight shifting dynamically to the striding leg as the push ends.
- ✓ The upper body and arms are well forward and high to load the poles for pole plant (poles are planted well in front of the binding of the gliding ski).
- ✓ There is a pre-load of the push leg before the push.
- ✓ Arms and legs are moderately flexed on pole plant.
- ✓ Upper body compression ends well before the horizontal position (i.e. there is less compression than in Double Pole).