**Freestyle Swim Flip Turn Checklist**

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The flip turn includes three main phases: The approach, the turn and the push-off.

**The approach:** When approaching the wall, leave one arm at the side (at the hip) and propel the body into THE turn with opposite arm. This opposite arm sweeps down, in and up until hips pass over it. The stroke of the free arm is similar to the arm stroke for the freestyle. Many swimmers perform a small dolphin kick while finishing THE arm pull with the hand ending at the side. This accelerates their hips and legs out of the water and aids in getting their feet out of the water faster for the turn.

![Flip turn approach with one arm at the side and one arm pulling back.](image)

**The Turn:** the turn often begins about 3.5-4 feet (1.06m-1.21m) from the wall. Once the ARM stroke begins, head should be quickly driven downward using trunk flexion and the chin tucked in using neck flexion to start the somersault. the swimmer should flex the trunk into a tuck (knees and feet pulled in) and use the arms to help keep the somersault rotating in the direction of the wall. While Keeping the elbows close to the body, push water towards THE head with your palms and forearms.
As you complete the half-somersault, let your elbows release from the sides of your body, bring your hands together above the head. Your knees should actually be flexed in excess of 90 degrees. Remember the key aspect of this turn: tuck the knees toward the chest. Get them as close as you can, and create the smallest possible circle with your body. This will produce the smallest possible moment of inertia and the least resistance to rotation around the left-right axis. The tighter the tuck of the body, the faster you spin. And the faster you spin, the sooner you're ready to come off the wall, and the more speed you carry off the wall.

The head should come up between arms as the feet reach the wall so the body is aligned and ready for the push off. Remember, the feet at the wall should be at the same level as the head. The feet should be planted on the wall with toes pointed upward and slightly outward in the direction that you will rotate. The knee angles at
contact with the wall are usually are smaller than 90 degrees. The hip angle is near 110 degrees. Everything from your hips up to the tips of your fingers should form a straight line, parallel to both the bottom of the pool and the surface of the water just before the push-off phase. Many swimmers, in their desire for speed, try to use their hands too much to help turn. Instead of going faster, they end up getting stuck in too tight a tuck position and then have to uncoil their body during the push off. By the time the push off occurs, the arms should be ready, in their connected, torpedo-like shape, to accept all the power that's coming.

Figure 4. Full turn.

Some elite swimmers, like Ian Thorpe, have a more advanced rotation skill. When he almost finishes the somersault movement, he initiates a rotation about the longitudinal axis. So when his feet plant on the wall, his feet are pointed sideways, as is his face and torso. This rotated position may help him get into prone position early and so have a better position during push off phase.

Figure 5. Feet on the wall (Ian Thorpe)
The push-off: The athlete must begin extending the legs immediately after contact is made with the wall. Straighten THE legs, thrusting you off of the wall, moving THE entire body into a streamline. Push straight forward off the wall or slightly deeper. The swimmer will rotate toward a sideward position during knee and hip extension and finally to a prone position by twisting your hands slightly and by looking in the direction you want to rotate. Some swimmers perform several quick, strong dolphin kicks while on their back and through the rotation process, some don't. When you get in prone position and the speed decelerates, do several strong dolphin kicks before arm stroke.