

# How to Fit a Hockey Stick

When choosing a stick for ice or inline hockey, there are three options to consider: a one-piece composite stick, a wood stick, or a shaft and blade combination.

## 1. STICK SIZING

Sizing is integral to your game. If the size and flex of your stick is not correct, the risk for failure in performance is much greater. If the stick is too small or not stiff enough, it could break easily. On the other hand, if the stick is too big or too stiff, it can hinder stick handling, passing and shooting. All of these are common problems when purchasing sticks for younger players. **Begin with determining the right stick that fits the player's height and length.**

## 2. STICK LENGTH

The length of the hockey stick is generally the easiest to determine, but imperative for a player's success in the game. Sticks usually come in four sizes: senior, intermediate, junior and youth. Each size normally reflects a smaller shaft circumference and a softer flex. Senior sticks are usually used by players ages 14 and up; intermediate for ages 10-15; junior for ages 7-12; and youth for players ages 4-8. Adult women generally use intermediate or flexible senior sticks.

Determining the appropriate stick length is relatively easy. Have the player stand in place without skates, place the toe of the stick on the ground between their feet and position the stick vertically against their body so that the stick comes to about their nose. If the stick is too long, simply make a mark where it touches their nose, and cut the handle of the stick accordingly.

If the player's skates are on, the stick should come up to their chin. Please note that this is a general rule of thumb and can change with personal preference. In addition to cutting sticks to the desired length, players may also extend a stick's length by inserting an end plug at the top of the shaft. This can be used to lengthen the life of a stick and get maximum use if the player cut the stick too short or experiences a growth spurt.

### **3. MATERIALS**

Sticks are composed of a variety of materials including: wood, wood and fiberglass, carbon and fiberglass, graphite and Kevlar.

Before deciding which stick is best for your game, ask the player these questions:

1. Are they using the stick for practicing in the garage or for street hockey?
2. Are they new to the game?
3. Is this their first stick?
4. Are they coming back to playing after a long break from the game?

If the answer is yes to any of the above questions, the player is likely best to use a slightly heavier stick to provide them with a better feel for the puck. The additional weight will help their shot during practice and give them more confidence when stick handling, passing or shooting on the ice.

Wood sticks are perfect for the casual street hockey player or for those trying the sport for the first time.

One-piece composite sticks are made of either, or a combination of, carbon-fiber, fiberglass, graphite, Kevlar, resin and other materials. These sticks are designed to provide a higher level of performance with lesser weight and greater torque. As a general rule, the higher concentration of quality materials will result in a lighter, more durable, and often more costly stick. These high-end materials produce lighter sticks, which create a faster energy transfer to deliver higher velocity shots and passes. Although heavier sticks still provide the best feel for the puck, manufacturers have developed the technology to incorporate materials in the blade of a composite stick that has dramatically improved the feel in recent years, making it an easier transition from wood to composite sticks.

### **4. FLEX**

The first thing many players do when they pick up a new stick is bend it. Why? Because they are testing out the “flex” or flexibility of the stick. A good fit is a stick that allows the player to bend the shaft a little, but without much effort. A stiff stick shaft lessens shot accuracy and puck speed and does not provide a good feel for the puck. Most players prefer flexible and light shafts that allow for optimal passing and shooting. Most stick manufacturers offer a variety of flexes. The higher the flex number, the stiffer the stick. Regardless of age, the correct flex for the player should allow him/her to bend the shaft when they take a wrist shot or slap shot.

Different manufacturers have different systems for measuring flex ratings, but most conform to this method: the flex is a measure of the amount of weight required to bend a stick 4 inches when suspended between two support points that are 48 inches apart. For example, an 85 Flex stick requires 85 pounds to be applied at the center point between two support points to flex the stick 4 inches.

Flex can be broken down into four categories: youth, junior, intermediate and senior. Youth sticks typically feature a 40 flex. Junior features a flex 50–52. Intermediate flex ranges between 65–67. For youth, junior and intermediate sticks, the flex is standard among all manufacturers. Please note that flex will change slightly if the stick has to be cut down to fit the size of the player. Although it is not an exact science, it is generally believed that each inch cut off the shaft causes a 10 per cent increase in stiffness. Senior sticks have the widest range of flex, from 75–110. The lower the flex the stick has, the higher its elasticity. The higher the flex, the less elasticity the stick has. As a general rule, the taller and heavier a player is, the higher flex the player will need.

## **5. GRIP**

**Grip vs. Non-grip:** Sticks can have either a smooth surface (Non-grip) or a textured sticky surface (Grip). The surface of a non-grip stick is smooth, allowing the bottom hand to easily move up and down the shaft for stick handling, passing and shooting. However, during a game it is possible for the gloves to become slick because of sweat, hindering a player's performance. If that is the case, a Grip stick might be the better option for the player. Some grips cover the entire stick, while other grips are only featured on the main area of the shaft where the player's hands are located. The grip can also be a coating or it could be incorporated in the texture of the stick. The main purpose of grip is to provide increased control if the player's gloves are wet. If the gloves are not wet, it may be more difficult for the player to move his/her bottom hand. Ultimately, the choice of grip or non-grip comes down to personal preference.

## **6. KICK POINT**

Kick point is the place on the stick that gives off the flex when you pass and shoot. Is the player a defenseman with the booming slap shot from the point or the forward taking the one-timer past the goalie? A mid- to low-kick point is best for either of these players because these players have a more powerful shot. If the player is more of an agile playmaker that stickhandles, makes tape-to-tape passes, and takes wrist shots and snap shots over slap shots, then a lower kick point is the right choice for a quicker release.

## **7. BLADE LIE**

The lie, or blade, of a stick is a classification of the angle that the stick shaft would take when the bottom of the blade is sitting flat on the ice. When purchasing a stick, the lie is part of the pattern, meaning that players tend to select sticks based on patterns they prefer. The more upright a stick is, the higher the lie number. Normally, stick lies range from 4.0–6.0 in half increments. Most sticks have a 4.5, 5.0 or 5.5 lie.