# SECTION 6 — MEASURING GOLF COURSES

# **1. GENERAL**

Because length is the predominant factor in determining ratings, accurate measurement of each hole is essential. Scorecard length is not acceptable as a sole source of measurement and must be verified. Measurements are made to determine horizontal distance from the teeing ground to the centre of the green along the intended line of play. This means that line of sight for uphill or downhill measurements must be corrected to horizontal distances. For example, on a downhill hole the recorded distance is that from the teeing ground to a point in the air above the centre of the green, that point being level with the tee.

If two or more sets of tees are in common use, separate measurements and tee markers must be established. The movable tee markers used to designate the teeing area (see the "Rules of Golf," Definitions) need to be consistent in colour or design for each hole and distinguishable from other tee markers. The actual colour, design, or other method for identifying a particular set of tee markers is up to the Committee in charge of the course in consultation with the Handicap Committee. Course Handicap Tables, scorecards, and signage where scores are submitted should use the same terminology in referring to the various tees. This material should include the Course Rating and Slope Rating for each set of tees to make it easy for players to convert a Handicap Index to a Course Handicap before play and then to submit a score for handicap purposes, complete with Ratings, after play.

# 2. APPROVED METHODS OF MEASURING GOLF COURSES

### **Use of Electronic Equipment**

With just a few hours of training, a person can learn how to measure a course with an approved electronic measuring device (EMD). An 18-hole course can be measured in about three hours. The EMD must be accurate to within 6 inches for up to 250 yards when used for hole measurements.

### **Use of the Global Positioning System**

This method can be used to measure golf courses if the Global Positioning System (GPS) is accurate to within 6 inches for up to 250 yards.

# 3. MEASURING

### **Starting Point: Permanent Markers**

Accurate permanent marker placement is imperative in the rating process. Permanent markers are to reflect an average placement of the movable tee markers over time. Incorrectly placed markers will make it difficult for the golf course staff to keep the effective course difficulty constant and in line with the ratings issued when setting up the course each day.

Permanent marker placement is more likely to have a greater impact on ratings than green speed, rough height, and other course maintenance practices. Courses should pay attention to this issue and are encouraged to consult the Authorized Association in the area for assistance in determining accurate placement.

When a single tee pad is designated for one set of tees, placement of the permanent marker at the middle of the tee pad is appropriate. This maximizes the ability to use the entire tee pad and reflects an average of movable marker placement over time.

When more than one set of tee markers uses a single tee pad, consider the percentage of a course's existing or anticipated play from each set of tees when determining permanent marker placement. Allocate the percentage of play for each tee and place each permanent marker at the mid-point of each of the allocated areas. In the example below, a 40-yard teeing area is shared by three sets of tees. The club determined that 25 percent of play will be from the forward tees, 50 percent from the middle tees, and 25 percent from the back tees. Allocation would then have the front 10 yards of the teeing area dedicated to the forward tees, the middle 20 yards to the middle tees, and the back 10 yards to the back tees. The permanent marker should be at the mid-point of each of these three areas as the following diagram depicts:



It is recommended to use percentages and mid-points to determine marker placement and stresses that at no time should a permanent marker be less than two yards from the front of a teeing area or less than four yards from the back of a teeing area.

On a nine hole course, if separate tees or tee markers are used for each nine of an 18-hole round, separate measurements and permanent markers must be established for each nine. The permanent markers (and their respective tee markers) for each nine should be uniquely identifiable.

#### **How to Measure**

Each hole must be measured horizontally (air line) to the nearest yard by surveying instruments, an EMD, or GPS from the permanent marker for every tee to the centre of the green. Distances on the scorecard should accurately reflect these measurements. Only trained individuals may perform course measurement, and the results are subject to review by the Authorized Association that issues the Ratings to the golf club. It is very helpful to have course staff available to answer any questions on course setup.

A hole with a dogleg must be measured on a straight line from each permanent marker to the centre of the fairway at the pivot point. If the pivot point is not easily discernable, select a pivot point that is approximately 250 [210] yards from the most commonly played tee for each gender. The measurement must continue from that point on a straight line to the centre of the green or the next pivot point, if applicable. If a dogleg causes a hole to play effectively shorter or longer for a scratch or bogey player, the rating team should make the appropriate adjustment under Dogleg/Forced Lay up in the Effective Playing Length Factors. The rating team should be aware how the hole was measured in order to reflect the dogleg adjustment properly in the rating process and if in doubt re-measure the hole to verify the information provided.



## Par-3 Hole or Straight Par 4/5

In measuring a par-3 hole (*see Example 1*), the EMD (or GPS point) is set up at the back centre of the green and readings are taken to each permanent marker. The EMD (or GPS point) is then moved to the front centre of the green, and readings to each marker are taken. The two readings to each marker are then averaged to

determine the distance from each marker to the centre of the green. An alternative is to set the EMD (or GPS point) at the front centre of the green and measure to all markers, and measure to the back centre of the green, then add one-half the green depth to each tee reading. A straight par-4/5 hole is measured using the same procedure, but may require an additional measurement point(s) along the centre line of the hole.

#### Par-4 Hole

On a par-4 hole (*see Example 2*), the EMD generally should be set up in the fairway at the pivot point. A measurement should be taken from the setup point to each of the permanent markers. Then measurements should be taken to the front and back edges of the green; these measurements should be averaged to determine the distance from the setup point to the centre of the green. The distance from the setup point to the markers should then be added to the distance from the setup point to the centre of the green to determine the length of the hole from each tee.

In examples 1 and 2, note that the measuring device is set up on a centre line perpendicular to the front and back edges of the green.



#### Par-5 Hole

When measuring a par-5 hole (*see Example 3*), two setups are usually required. The first setup should be at the first pivot point, and the second setup should be at the second pivot point, if applicable.

Readings should be taken from the first setup point to the permanent markers and to the setup point of the second pivot point. The instrument should then be moved to the setup point at the second pivot point from which readings to the front and back edges of the green should be taken and then averaged. To determine the length of the hole, add the distances from (1) each marker to the first setup point, (2) the first setup point to the second setup point, and (3) the second setup point to the centre of the green.

# 4. MEASUREMENTS FOR COURSE RATERS

In addition to measuring hole lengths from all tees, the measuring team can greatly assist the course raters who will follow by determining:

- Width and depth of each putting green;
- Widths of landing zones for scratch and bogey golfers for each hole; and
- Distances required to carry obstacles off the tee or from the various landing zones.

