



BOWLS
VICTORIA

**GREENS INSPECTOR
COURSE WORKBOOK**

NEW GREEN – Requires BV Greens Committee Inspection

Means construction of a green at a site where a green has not previously existed. This includes **NEW:**

- Drains
- Base
- Ditches
- Plinths
- Banks and surrounds
- natural or synthetic surface

RECONSTRUCTED, CONVERTED & RESURFACED GREENS | Requires BV Greens Committee Inspection.

Means alterations to any of the following:

- Drains
- Base
- Ditches
- Plinths
- Banks and surrounds
- Conversion from Natural surface to a Synthetic surface
- Conversion from Synthetic surface to a Natural surface
- Conversion to a different type of Synthetic surface
- Conversion to a different type of Natural surface
- Replacement of a Synthetic surface
- Rolling back a Synthetic surface
- Re-stitching a Synthetic surface

REPAIR AND MAINTENANCE | DO NOT Require BV Greens Committee Inspection

Means Means alterations to any of the following:

- Removal of excess filling from ditches
- Repair of Banks covering material
- Top dressing
- Coring
- Resewing of bare patches
- Vacuuming/Sweeping of Synthetic surfaces
- Scarifying

Banks, Ditches and the Green

(All Laws, Law numbers & page numbers are reproduced from Laws of the Sport of Bowls, Crystal Mark Third edition, Version 3.1, April 2019).

BANKS	Height	230mm – Minimum above playing surface	Law – 48.2	Page - 67
	Surface	Made of a material that will not damage jack or bowl.	Law – 48.4	Page - 68
	Advertising Banners	Made of a material that will not damage jack or bowl.	Law – 48.6	Page - 68
	Markings – Side Banks	2m & 23m must be marked on the side banks. These markings, rink numbers & boundary pegs must be the only visible marking on the side banks.	Law 49.12	Page - 70
BOUNDARY PEGS	Outdoor & Indoor. Height – Fixed on top of bank. Height – Fixed to face of bank. (Height limitation is not applicable to flexible boundary pegs) Distance from side Ditch Outdoor – Indoor -	600mm 430mm 600mm 460mm	Laws – 49.3.1, 49.3.2, 49.4.1, 49.4.2, 49.4.3 Law – 49.6.1 Law – 49.6.2	Page - 69 Page - 70
	Width	Less than 50mm	Law - 49.4.1	Page - 69
	Distance Back from face of Bank	Less than 100mm.	Law – 49.3.2	Page - 69
	RINK NUMBERS	Distance Back from face of Bank	Less than 100mm.	Law – 49.2.2
DITCHES	Width	Between 200mm & 380mm wide	Law – 47.2.1	Page - 67
	Depth	Between 50mm & 200mm deep	Law – 47.2.2	Page - 67
	Holding Surface	Must be free from obstacles & made of a material which will not damage the jack or bowls.	Law - 47.3	Page - 67
GREEN	Width -	Depends on the number of rinks.		
	Length in direction of play	Between 31m & 40m.	Law – 46.2	Page - 67
		Must be rectangular or square (Maximum of 40m x 40m)	Law – 46.1	Page – 67
	Playing Surface	Must be level & free of hollows, weeds & bumps.	Law – 46.3	Page – 67
	Grass or Synthetic	Law – 46.4	Page – 67	
RINKS	Width - Outdoor	Must be between 4.3m & 5.8m	Law – 49.1.1	Page – 68
	Width - Indoor	Must be between 4.6m & 5.8m	Law – 49.1.2	Page – 68
	Length	Between 31m & 40m.	Law – 46.2	Page – 67
	Numbers	Must be numbered in order	Laws – 49.2 49.2.1 49.2.2	Pages – 67 & 68
	Rink boundary pegs	SEE – Boundary pegs above		
	Markings	Centre line of the rink can be marked along the surface of the green starting 2m from the end ditch & finishing not less than 23m from the opposite end ditch. Centre line of the rink can be marked 2m from each end ditch. The mark can be either in the form of a “T” or: a small piece of suitable material inserted immediately below the surface of the green (Outdoor only).	Law – 49.13 Law - 49.14 Law – 49.14.1 Law – 49.14.2	Page – 71 Page - 71
Markings continued				
TIMING A GREEN	Ramp	See attached sheets		
	Stopwatch	See attached sheets		

Checking a rink for:

- **Draw** – Bowls should run true on both hands in both directions.
- **Runs** - Bowls deviates from course due to imperfection in the playing surface.
- **Runoffs** – A bowl when delivered at a very slow speed (to only travel approx. 1m to 1.5m) across the end of a rink with the bias side of the bowl facing away from the ditch should not fall into the ditch.
- **Re-bounds** – Stand at approximately 6m from the “T” and deliver a drive into the bank. The bowl should drop into the ditch. If it rebounds onto the green, go back to the 21m mark and re-deliver the bowl. If the bowl still re-bounds, the Greens Inspection Form should be marked Yes.

GRADING of GREENS

- **“A”** - the green complies with all, of the Laws of the Sport v3.1 and BV Rules for Competition and has no defects in the playing surface at the time of inspection. (Suitable for Pennant & BV Championship events and above)
- **“B”** - the green complies with all, of the Laws of the Sport v3.1 and BV Rules for Competition, but may have minor defects in the playing surface at the time of inspection. (Suitable for Pennant & Club Championship and Region/Division events)
- **“C”** - the green complies with most of the Laws of the Sport v3.1; and BV Rules for Competition i.e. Banks may be damaged and may have some minor rebounds and/or runoffs, playing surface may need re-marking and minor defects or weeds in the playing surface at the time of inspection. (Suitable for Pennant including Home Finals & Club events)
- **“D”** - the green is deemed to be in worse condition than in “C” above and is really only suitable for Club events; i.e. Banks may be damaged and may have rebounds and/or runoffs, playing surface may need re-marking and with defects and/or weeds in the playing surface and ditches at the time of inspection. (Suitable for Pennant & Club events)
- **“E”** – the green is only fit for “Club events” bowls and is not approved and must not be used for any Pennant or Champions hip events

CLOSING RINKS

- If you have, to close a rink, the numbering of the rinks must, still, remain in consecutive order.

CLOSING A GREEN

- **Weather** – This is normally done by the Club’s Green keeper or Greens director.
- **Complaint in writing from a visiting club/player** -

Do an inspection as soon as possible after receiving the written complaint (generally within one or two days) and base your decision on the “Grading of Greens guidelines above.

SECTION 4 – Field of play and equipment

SECTION 4.1 – THE GREEN, DITCH BANKS AND RINKS

46 The green

- 46.1 The Green must be either rectangular or square.
- 46.2 The length of the green in the direction of play must be between 31 metres and 40 metres.
- 46.3 The green must have a suitable playing surface.
- 46.4 The playing surface must be either vegetation or a synthetic surface approved by a Member National Authority.
- 46.5 For domestic play, Member National Authorities can decide the standards for greens constructed in line with previous editions of this law.

47 The ditch

- 47.1 The green must be surrounded by a ditch.
- 47.2 The ditch must be:
 - 47.2.1 between 200 millimetres and 380 millimetres wide; and
 - 47.2.2 between 50 millimetres and 200 millimetres deep.
- 47.3 The ditch must have a holding surface which is free from obstacles and made of a material which will not damage the jack or the bowls.
- 47.4 For indoor greens and outdoor greens where play is possible in only one direction, only the end ditches in the direction of play must meet the standards mentioned in laws 47.2 and 47.3.

48 The bank

- 48.1 The ditch must have a bank against its outer edge.
- 48.2 The top of the bank must be at least 230 millimetres above the surface of the green.
- 48.3 The bank must be vertical and set at a right angle (90°) to the surface of the green, or sloped at an angle of not more than 35° from the vertical (see diagrams B.1.1, B.1.2 and B.1.3 in appendix B.1).
- 48.4 The surface of the bank must be made of, or be covered with, a material which will not jack or the bowls.
- 49.5 There must be no steps cut that could interfere with play either cut into or positioned against the face of the bank.
- 49.6 If advertising banners are fixed to the face of the bank, they must be made of a material which will not damage the jack or the bowls. Also, they must be fixed in a way that makes sure the specifications for the ditch and the bank, as described in laws 47 and 48, still apply. The banners will be considered to be part of the face of the bank for all purposes within the laws.

49. Division of the green

The green must be divided into sections called rinks.

- 49.1 The rinks must be:
- 49.1.1 between 4.3 metres and 5.8 metres wide for outdoor play; and
 - 49.1.2 between 4.6 metre and 5.8 metres wide for indoor play.
- Wherever possible, all rinks on a green must be the same width. For domestic play, Member National Authorities can decide the standard for the minimum width of a rink.
- 49.2 The rinks must be numbered in order, with the centre of each rink being marked on the bank at each end by a peg, disc or other suitable device that has the rink number on it and is fixed vertically:
- 49.2.1 to the face of the bank and flat against it; or
 - 49.2.2 on the top of the bank not more than 100 millimetre back from its face;
 - 49.2.2 on the wall behind the bank (for indoor play only).
- 49.3 The four corners of the rinks must be marked by white or brightly coloured boundary pegs that are fixed vertically:
- 49.3.1 to the face of the bank and flat against it; or
 - 49.3.2 on the top of the bank not more than 100 millimetres back from its face.
- 49.4 The Boundary pegs must be:
- 49.4.1 not more than 50 millimetres wide and not more than 430 millimetres high if they are fixed to the face of the bank of an outdoor green; and
 - 49.4.2 not more than 25 millimetres wide and not less than 600 millimetres high if they are fixed on the top of the bank of either an outdoor or an indoor green (although this height limitation does not apply to flexible boundary pegs containing a spring or similar mechanism in their base that allows them to bend on contact with an object or person); or
 - 49.4.3 not more than 25 millimetres wide and the centre if the peg must be clearly marked by a thin black vertical line if they are fixed to the face of the bank of an indoor green.
- 49.5 For domestic play, Member National Authorities can decide:
- 49.5.1 the standards for boundary pegs made in line with previous editions of this law; and
 - 49.5.2 the requirements for thin black vertical lines marking the centre of boundary pegs that are fixed to the face of the bank of either an outdoor or an indoor green.
- 49.6 The boundary pegs of an outdoor rink must be:
- 49.6.1 at least 600 millimetres from the side ditch for outdoor play; and
 - 49.6.2 at least 460 millimetres from the side ditch for indoor play.
- 49.7 If a boundary peg is not vertical, it must be put so before a player or the umpire decides whether or not a jack or a bowl is within the boundary. (The requirement to put the boundary peg vertical need not apply if the umpire uses a boundary scope to make the decision.)
- 49.8 If a player or the umpire finds a boundary peg in the wrong position, they must not move it until the end has been completed on any rinks affected. The peg must be then correctly positioned by the umpire or by agreement between the skips or opponents in Singles on the rinks affected.
- 49.9 For outdoor play, the side boundary of the rink of play can be marked by connecting the boundary pegs with a green thread drawn tightly along the surface of the green, leaving enough loose thread to reach the corresponding pegs on the face or on top of the bank. For domestic outdoor play, Member National Authorities can decide not to use boundary threads.

- 49.10 The boundary thread (see law49.9) must not be lifted or held down when the jack or bowl is in its original course or in motion.
- 49.11 Pegs, discs and other types of markers used to mark the centre and corners of the rinks must be made of a material which will not damage the jack or bowls.
- 49.12 White or brightly coloured pegs, disc or other suitable markings must be fixed or marked vertically against the face of the side banks or fixed on top of the side banks in the direction of play to mark distances of 2 metres and 25 metres from the end ditches (see diagram B.4.1 in appendix B.4). Wherever possible, these must be the only pegs, discs or markings visible on the side banks.
- 49.13 The centre line of each rink can be marked along the surface of the green starting 2 metres from each end ditch and finishing at any point up to, but not less than, 25 metres from the opposite end ditch (see diagram B.2.1 in appendix B.2).
- 49.14 The centre line of the rink can be marked at a distance of 2 metres from each end ditch (see diagram B.2.2 in appendix B.2). The mark can be:
 - 49.14.1 lines drawn in the form of a 'T'; or
 - 49.14.2 a small piece of suitable material inserted immediately below the surface of the green (for outdoor play only).
- 49.15 If part of the green is used for spectators, side ditches do not have to be used, but the distance markers on the side banks must be brought forward and fixed appropriately. They must be clearly visible to the players.
- 49.16 While there is temporary seating on the green, there must be a completely unrestricted area of the green that is at least 900 millimetres wide between the seated area and the outside boundary of the nearest rink.

SECTION 5.2

57. Regulations for Play

57.1 Domestic regulations

- 57.1.1 For domestic play, Member National Authorities can make regulations ('domestic regulations') to cover the following aspects of the sport:
 - 57.1.1.2 requirements for using portable ground sheets as an alternative to fixed groundsheets (see Law 6.1.5.6);
 - 57.1.1.3 the distance from the mat line within which a jack can come to rest for it to be considered to be improperly delivered (see Law 10.5);
 - 57.1.1.9 the use of synthetic surfaces (see Law 46.4);
 - 57.1.1.10 standards for greens constructed in line with previous editions of the Laws of the Sport of Bowls (see Law 46.5);
 - 57.1.1.11 standards for the minimum width of a rink (see Law 49.1);
 - 57.1.1.12 standards for boundary pegs made in line with previous editions of the Laws of the Sport of Bowls (see Law 49.5);
 - 57.1.1.13 requirements for thin black lines to mark the centres of boundary pegs that are fixed to the face of the bank of an outdoor green or fixed on the top of the bank of either an outdoor or an indoor green (see Law 49.5);
 - 57.1.1.14 the use of boundary threads (see Law 49.9);

DIRECTIONS:

1. Place the ramp at the two metre mark on a central rink of one of those designated for use.
2. Attach a metric measuring tape to the ramp hook & secure it with wing-nut.
3. Hold the sphere against the ramp backstop then release it without pushing.
 - The sphere is only to be rolled once at each position,
 - Measure and record the distance of this first roll,
 - Measure to the centre of the sphere.
4. Place the ramp at about one third of the length of the green on the same rink and repeat the procedure as described in (3).
5. Repeat this procedure again in the opposite direction on the same rink so that four readings in total have been recorded.
6. Total the sum of the four readings then divide by four.
7. Refer to the scale and convert the average distance of the sphere to seconds. This system is accurate, take care with the measurements.
8. Make sure the ramp and sphere are kept clean or there will be misleading results.

Important: Please ensure all measurements are taken and recorded on the same rink.

- Timing ramp calculations are based on a precise distance of 27 metres.
 - Time = Seconds
 - Sphere = Distance travelled to the nearest centimetre.
9. This ramp may only be used on grass and sand infill synthetic Greens.
 10. For carpet type Greens including needle-punch the traditional stop-watch method must be used over 27 metres.
 11. When timing the Greens for Pennant it must be done by the appointed Umpire of the day in conjunction with the Senior Visiting Side Manager or their representative of the Side due to play on that respective Green.

SPHERE DISTANCE	TIME
3.60m	9.25 sec
3.80m	9.50 sec
4.00m	9.75 sec
4.30m	10.00 sec
4.50m	10.25 sec
4.80m	10.50 sec
5.00m	10.75 sec
5.30m	11.00 sec
5.60m	11.25 sec
5.90m	11.50 sec
6.10m	11.75 sec
6.40m	12.00 sec
6.70m	12.25 sec
7.00m	12.50 sec
7.30m	12.75 sec
7.60m	13.00 sec
7.90m	13.25 sec
8.20m	13.50 sec
8.50m	13.75 sec
8.80m	14.00 sec
8.80m	14.00 sec
9.10m	14.25 sec
9.40m	14.50 sec
9.70m	14.75 sec
10.00m	15.00 sec
10.30m	15.25 sec
10.60m	15.50 sec
10.90m	15.75 sec
11.20m	16.00 sec
11.50m	16.25 sec
11.80m	16.50 sec
12.10m	16.75 sec
12.30m	17.00 sec
12.60m	17.25 sec
12.90m	17.50 sec
13.10m	17.75 sec
13.40m	18.00 sec
13.60m	18.25 sec
13.90m	18.50 sec
14.10m	18.75 sec
14.30m	19.00 sec
14.50m	19.25 sec
14.80m	19.50 sec
15.00m	19.75 sec
15.20m	20.00 sec
ATTACH COPY OF THIS CHART TO SIDE OF RAMP FOR CONVENIENCE	

Procedures to time a Bowling Green without a Timing Ramp



1. Place the mat at the 2m mark of a middle rink that is to be played on.
2. Place the jack on centre line of the rink 27m from the mat line.
3. Stand near the jack and using a stopwatch, have a bowler deliver a bowl on the forehand to within 1m of the jack.
4. Press to start the stopwatch when the bowl leaves the bowlers hand and press the stop button when the bowl ceases forward motion.
5. If the bowl does not stop within 1m of the jack, repeat steps 3 & 4 until it does.
6. Record the time shown on the stopwatch.
7. Repeat steps 3, 4, 5 & 6 on the back hand.
8. Move to the other end of the same rink and repeat steps 3 – 7.

The umpire will then add the four timings together and then divide by four (4) in order to calculate the average relative to **the number of seconds taken by a bowl from its delivery to the moment it comes to rest at approximately 27 metres from the mat line**. This is recorded as the **Pace of the green** for that day's play.

2 metre & 23 metre distance marks on side banks

It's important for Clubs to note that the 2 metre & 23 metre Distance Marks must be marked correctly on the Banks as per the Laws of the Sport of Bowls (Law 49.12) which is appended below.

(Be aware though that the 25 metres from end ditches has been replaced with 23 metres under Domestic Regulations for Australia covering the minimum length end of 21 metres).

Law 49.12

*White or brightly coloured pegs, discs or other suitable markings must be fixed or marked vertically against the face of the side banks or fixed on top of the side banks in the direction of play to mark distances of 2 metres and 25 metres from the end ditches (see diagram B.4.1 at appendix B.4).
Wherever possible, these must be the only pegs, discs or markings visible on the side banks.*

The Distance Chart diagram at Appendix B.4.1, on Page 104 of the Law Book, which is shown below, correctly shows + signs which indicate the relevant 2 metre and 23 metre marks (ditches) on the side banks green.

Clubs which have the 2 metre and 23 metre Distance marks extended across the full width of the green are to cease this practice forthwith and ensure that all markings on the surface of the green comply with Law 49.14 as per Appendix B.4.1 are adopted.

Law 49.14

The centre line on the rink can be marked at a distance of 2 metres from each end ditch (see diagram B.2.2 in appendix B.2). The mark can be:

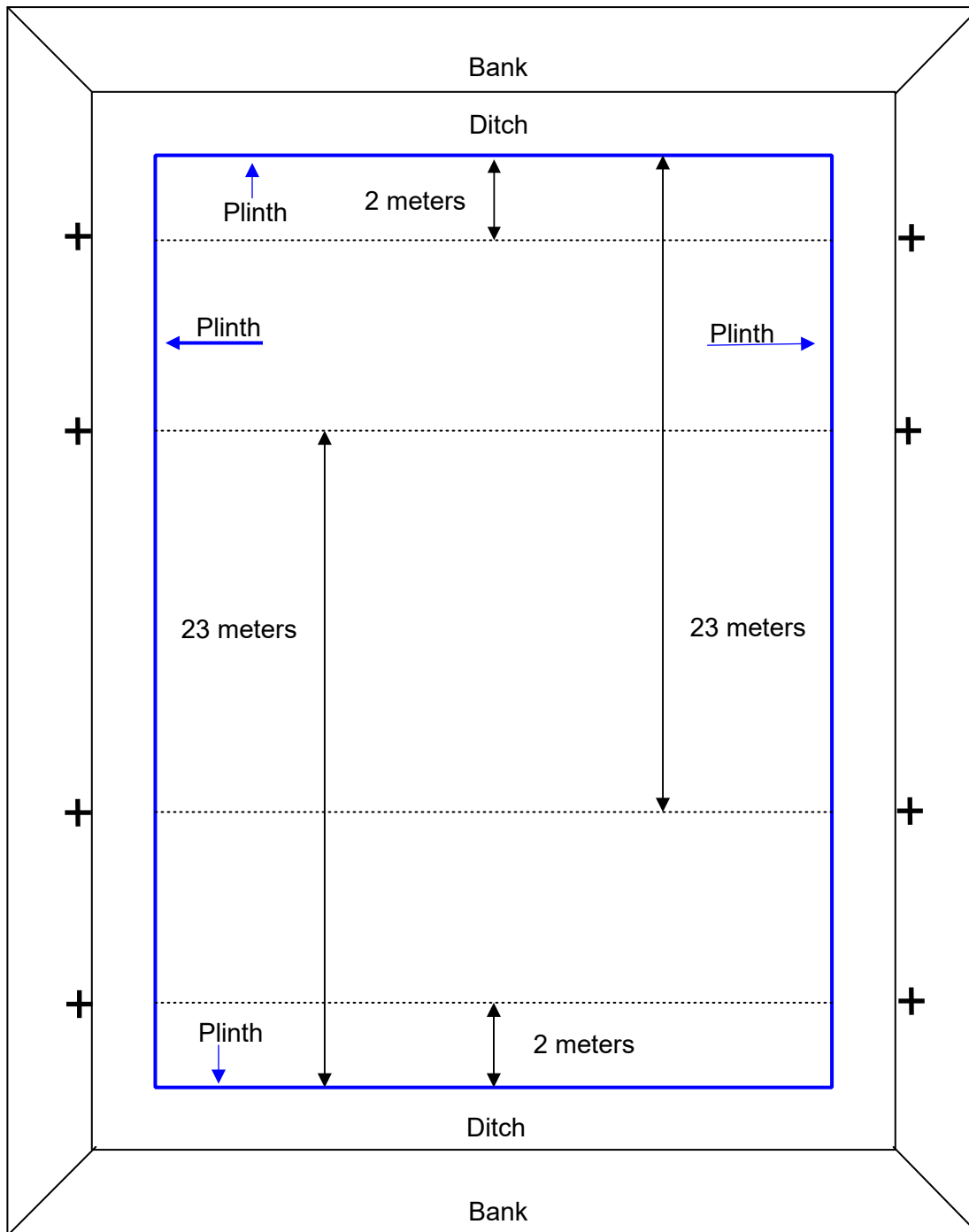
49.14.1 lines drawn in the form of a "T"; or

49.14.2 a small piece of suitable material inserted immediately below the surface of the green (for outdoor play only).

B.4 Distance Charts

(Chart has been Amended for Australian Domestic Regulations)

B.4.1 Pegs or discs fixed against the face of the side banks or on top of the side banks (illustrated by a '+')



* For domestic play in Australia the distance markers should be 23m from the ditch (Plinth).