



Cross Country Course Design Guidelines

EV70, EV80, EV90 and EV100

1st March 2015

Introduction

These guidelines are intended to provide a framework around which to work when designing and building cross-country courses at level Ev100 and below. Discussions between the Course Designer and Technical Delegate are essential during this process.

It is emphasised that they are guidelines rather than rules.

The course design objective is to provide a flowing course appropriate to the level of competition, creating a good picture, educational for both horse and rider and made to look easy by the best.

It is recommended that no more than 4 fences over the course are shared with the same dimensions, preferably not towards the end of the course, except the last fence.

As a general rule it is recommended that fences are sited every 100m.

Introduction to Eventing Ev70 & Ev80

Objective of Ev70 and Ev80

Ev70 and Ev80 have the same ethos and have been combined for these guidelines

This class will serve as an educational step for riders and horses, of all ages, towards competing and experiencing events at the lowest entry level, offering the benefit of the highest standards of course design and building.

Riders should be able to canter, around the course, in a good rhythm. They will be expected to be able to go up and down hills/slopes and to jump a variety of straight forward fences.

The cross country course should be made up of inviting, flowing, balanced and encouraging fences, with the minimum amount of technicality. Horses must be given every opportunity to be able to get into a rhythm. Horses and riders must have a chance to grow in confidence.

Time is not expected to be a key element in the EV70 and Ev80 level.

It is intended that these guidelines be used to create a base standard for South African Eventing 80 classes. Advice from a Technical Delegate is essential during the design, construction and alteration of courses.

Design and Construction

At this grass roots level, the variety in the way that obstacles appear and their profile is very important. Obstacles which have a sympathetic and more forgiving profile should be used wherever possible. All obstacles should have a well defined ground lines and their jumpable width should be wide and inviting.

Courses should have a good balance of fences and the first six fences should encourage horses to jump confidently and in a rhythm.

This inclusion of more upright fences: post and rails, is appropriate and educational but care should be given in the correct positioning of upright fences.

See fence types and their suitability at Ev70 and Ev80 level are considered in **Table A**

1. Combinations and Related Distances

There should be a **minimum of one and maximum of three combinations** over the course, excluding the water fence. They should not appear before Jumps 4 - 6 and preferably in the last two thirds, to allow sufficient time for competitors to have warmed up before any questions are asked. (A combination is defined as elements with two or less non jumping strides in between. Related distances refer to distances above two or more non jumping strides.)

Combinations should be simple and straight forward consisting of not more than two elements.

Sympathetic fence profiles should be used. Avoid using fence types which can jump erratically and alter distances between elements e.g. brush fence as the first part of the combination.

Combinations and related distance should not be sited at the end of galloping stretches, on the downhill slopes or in an area with a confined access or exit. Avoid areas in the shadow or with poor light. A slow measured approach should be the designer's aim.

Distances

Bounce distances are **NOT** to be used at this level.

2) Alternatives

Alternatives are unnecessary at this level, as no fences, combinations or related distances should be difficult enough to warrant an alternative.

3) Water Obstacles

Ev70 and Ev80 competitors should be expected to negotiate a simple "dew pond" (small pan) type complex, with a ramp into and out of the water. Competitors are not expected to jump into or out of water. Gently sloping sides into the water with no straight edges are recommended.

4) Narrow Fences

Narrow fences can be introduced at Ev80 level. There should be a maximum of 3 minimum jumpable width fences. (Jumpable width is defined as "between the flags")

The minimum jumpable width should be **2.40m**. This should be made more inviting with the use of trees a dressing to create an impression of width and to help guide competitors in. In the case of brush fences, cutting in smiley face creates such an impression.

5) Tables

All tables should either be filled in with a sloping front face, with such face sloping away from the horse on the take off side of the fence (this would be appropriate for the traditional sleeper tables or churn stands) or, in the case of picnic tables, the top line should have a vertical face of at least 0.25m and there should be a seat in front of the table, also with a vertical face of at least 0.25m.

Seats must not be placed on the landing side of the table, as this may present a false ground line.

6) Verticals

Verticals/uprights should not be sited, where it is possible for many riders/horses to approach them too fast, but are advisable.

7) Core Elements

Table A identifies fence types for inclusion in Ev70 and Ev80 courses and recommendations for construction and design. Fence types highlighted (Bold in italics) are considered to be core elements to Ev70 and Ev80 classes and each cross country course should have at least **4 different core fence types**.

Table A – Eventing 70 and 80 Design Guidelines

	Ev70	Ev80
Jumping Efforts	15 to 20	18 to 24
Course Length	1500 to 2200m	1800 to 2600m
Speed	420m per minute	435m per minute
Dimension of Obstacles		
Max Height	0.70m	0.80m
Max spread at Highest Point	0.80m	0.90m
Max Base Spread	1.00	1.20m
Max Spread (without height)	0.90m	1.00m
Max Drop	1.00m	1.20m
Maximum depth of water	0.20m	0.20m

Fence Type	Appropriate	Suggested Dimensions	Notes
<i>Verticals & Palisades</i>	<i>Yes</i>	<i>Base spread min 30cm Recommended 50cm</i>	<i>See main notes</i>
Parallels	No		
<i>Table Top Type</i>	<i>Yes</i>	<i>Back min 5cm Higher than front</i>	<i>See main notes</i>
Bench/Chairs	Yes	Height at front 30cm	A min of 10 degree slope

		Base spread 1.00m	on back of seat The slope from front of seat to top of bench to b 40/50 degrees.
Round Tops	Yes	Base spread 1.25m	
Brush Box	Yes	Min of 0.25m of brush Height of solid part of fence 0.70m	
Bullfinch	No		
Feeder	Yes		Filled with straw Good ground line
Ramps	Yes		Recommended 40/50 degree slope
Trakehner	Yes	Small log, min jumpable width 3.6m	Scoop Ditch
Water	Yes	Min width of water crossing to btw 6.00m	See main notes
Brush to Open Ditch	No		
Wall to Open Ditch	No		
Half Coffin	Yes	Recommended two non-jumping strides between elements. Ditch Min. Jumpable width 3.6m.	Jumping element can be before or after ditch. Ditch to be well defined
Open Ditch	Yes	Clear Ground Lind Min jumpable width 3.6m Maximum depth 60cm	
Full Coffin	No		
Sunken Road	No		
Bounces	No		
Corners	yes		Must be inviting, with trees
Log Piles	Yes		
Banks	Yes	No bounce distances	Clear defined jump off
Drop Fences	Yes		If possible never into flat ground.
Elephant Traps	No		
Zig zag	No		
Roofs & Keyholes	Yes	Any fixed barrier above the obstacle must be a min of 3.36m above the ground level.	Provided there is ample space. Should be seen as decorative not a jumping test.
Narrow Fences	Yes	Min 2.40m	See main notes
Steeplechase	Yes	Take off boards 45/55 degree angle	Knee rail 0.52cm high
Helsinki Steps	No		
Steps	Yes	Single step height 0.70m	
Sharks Teeth	Yes		
Triple Bars	Yes	Base spread 1.00m	



Eventing Ev90

Objective of Ev90

Riders should be able to canter, around the course, in a good rhythm. They will be expected to be able to go up and down hills/slopes and to jump a variety of straight forward fences.

The cross country course should be made up of inviting, flowing, balanced and encouraging fences, with the minimum amount of technicality involved.

Ev90 classes need to cater for “Ev90 only” competitors as well as those who will use it as an educational stepping stone to progress up the classes. Time is not expected to be a key element in the Ev90 level.

It is intended that these guidelines be used to create a base standard for South African Eventing 90 classes. Advice from a Technical Delegate is essential during the design, construction and alteration of courses.

Design and Construction

This is still an introductory level, but slightly more sophisticated questions are asked.

At this grass roots level, the variety in the way that obstacles appear and their profile is very important. Obstacles which have a sympathetic and more forgiving profile should be used wherever possible. All obstacles should have a well defined ground lines and their jumpable width should be wide and inviting.

Courses should have a good balance of fences and the first six fences should encourage horses to jump confidently and in a rhythm.

This inclusion of more upright fences: post and rails, is appropriate and educational but care should be given in the correct positioning of upright fences.

See fence types and their suitability at Ev90 level are considered in **Table A**

1. Combinations and Related Distances

There should be a **minimum of two maximum of four combinations** over the course, excluding the water fence. They should appear in the last two thirds, wherever possible, to allow sufficient time for competitors to have warmed up before any questions are asked. Combinations should not appear before fence 4. (A combination is defined as elements with two or less non jumping strides in between. Related distances refer to distances above two or more non jumping strides.)

Combinations should be simple and straight forward consisting of two elements, one combination of three elements is allowed

Sympathetic fence profiles should be used. Avoid using fence types which can jump erratically and alter distances between elements e.g. brush fence as the first part of the combination.

Sympathetic fence profiles should be used. Avoid using fence types which can jump erratically and alter distances between elements e.g. Brush fence as the first part of a combination.

Combinations and related distances should not be sited at the end of along galloping stretches, on a downhill slope or in an area with a confined access or exit. Avoid areas in show or with poor light. A slow measured approach should be the designer's aim.

Distances

Bounce distances, on fences with height, should not be used at this level. (A bounce distance between two steps is permitted – see table)

2) Alternatives

Alternatives should not be necessary as the direct route should be suitable for the majority of competitors. Where they are considered necessary, they should be asking the same type of question as the direct route e.g. accuracy, be the same in construction (where possible) and be easier and more time consuming to execute.

3) Water Obstacles

Ev90 competitors should be expected to negotiate a simple "dew pond" (small pan) type complex, with a ramp into and out of the water. Gently sloping sides into the water with no straight edges are recommended. A step into water is permitted, with a maximum drop to the bottom of the water of 40cm, a ramp alternative is recommended

Obstacles before water

Obstacles placed before a ramp into water should be on one non jumping stride or more. Fence profiles should be sympathetic. Maximum height fences should be avoided

Obstacles after Water

Obstacles after a ramp out of water should be sited on one non jumping stride or more. Fence profiles should be sympathetic.

Steps out of Water

Steps out of water s are acceptable, but not recommended, and must be well defined. Consider painting the top of the step out with a suitable defining colour. NO Jumps in water. The depth of water (max 0.20m) is not the test.

4) Narrow Fences

Narrow fences should be introduced at Ev90 level. They should start to set the rider and horse a test of accuracy and honesty. There should be a maximum of 3 minimum jumpable width fences. (Jumpable width is defined as “between the flags”)

The minimum jumpable width should be **2.00m**. This should be made more inviting with the use of trees a dressing to create an impression of width and to help guide competitors in. In the case of brush fences, cutting in smiley face creates such an impression.

Fences whose jumpable widths reduce from back to front i.e. arrow heads should have a front face jumpable width of a minimum of 1m. Base spread should not exceed 75% of maximum allowed.

5) Tables

All tables should either be filled in with a sloping front face, with such face sloping away from the horse on the take off side of the fence (this would be appropriate for the traditional sleeper tables or churn stands) or, in the case of picnic tables, the top line should have a vertical face of at least 0.25m and there should be a seat in front of the table, also with a vertical face of at least 0.25m.

Seats must not be placed on the landing side of the table, as this may present a false ground line.

6) Verticals

Verticals/uprights should not be sited, where it is possible for many riders/horses to approach them too fast.

7) Core Elements

Table A identifies fence types for inclusion in Ev90 courses and recommendations for construction and design. Fence types highlighted (Bold in italics) are considered to be core elements to Ev90 classes and each cross country course should have at least **4 different core fence types**.

Table A – Eventing 90 Design Guidelines Jumping Efforts 18 to 24

Course Length 2000 to 2600m

Speed 450m per minute

Dimension of Obstacles

Max Height 0.90m

Max spread at Highest Point 1.00m

Max Base Spread 1.50m

Max Spread (without height) 1.50m

Max Drop 1.35m

Maximum depth of water 0.20m

Fence Type	Appropriate	Suggested Dimensions	Notes
Verticals & Palisades	Yes	Base spread min 30cm Recommended 50cm	See main notes
Parallels	Yes	Back rail minimum 5cm higher than front	
Table Top Type	Yes	Back min 5cm Higher than front	See main notes
Bench/Chairs	Yes	Height at front 40cm Base spread 1.20m	A min of 10 degree slope on back of seat The slope from front of seat to top of bench to b 40/50 degrees.
Round Tops	Yes	Base spread 1.35m	
Brush Box	Yes	Min of 0.25m of brush Height of solid part of fence 0.80m	
Bullfinch	No		
Feeder	Yes		Filled with straw Good ground line
Ramps	Yes		Recommended 40/50 degree slope
Steps*	Yes	1. Single step height 0.90m 2.2 steps height 0.75m No bounce on descent No fences associated after 2 steps down	Fences associated before a step down, on a distance not less than 9.10m Landing of steps to be on a slope
Trakehner	Yes	Shallow ditch, min jumpable width 3.6m	Ground Line essential
Water	Yes	Min width of water crossing to be 6.00m	See main notes
Brush to Open Ditch	Yes	Min 0.25m of brush, height of solid part of fence 0.80m Base spread 1.10m Min jumpable width 3.6m	Ground line essential Not recommended within a combination
Half Coffin	Yes	Recommended two non jumping strides between elements. Not less than 9.10m Ditch min jumpable width 3.6m	Jumping element can be before or after ditch. Ditch to be well defined
Open Ditch	Yes	Min jumpable width 3.6m	Clear ground line
Full Coffin	Yes	Simple	Permitted, but not recommended
Sunken Road	Yes	Simple, a minimum of two non jumping strides	Permitted, but not recommended
Bounces	No		
Corners	Yes	Top spread max 1.00m measured 1.10m in from point of corner Back to be minimum 5cm	Decking of corner – not essential Steps must be taken to ensure corner is not

		<i>higher than front Suggest 30 degree angle</i>	<i>jumped where it is too wide</i>
Log Piles	Yes		
Banks	Yes	No bounce distances	Clear defined jump off
Drop Fences	Yes		If possible never into flat ground.
Elephant Traps	No		
Zig zag	No		
Roofs & Keyholes	Yes	Any fixed barrier above the obstacle must be a min of 3.36m above the ground level.	Provided there is ample space. Should be seen as decorative not a jumping test.
Narrow Fences	Yes	Min 2.00m	See main notes
Helsinki Steps	Yes	3.00m sections	On gentle slope only
Steps	Yes	Single step height 0.70m	
Sharks Teeth	Yes		
Triple Bars	Yes	Base spread 1.10m	

*It is worthy to note that a double of steps on a bounce distance, is the only bounce experience an Ev90 horse/rider will experience.



Eventing Ev100

Objective of Ev100

Ev100 is to encourage less experienced riders and horses to compete in and enjoy the demands of Eventing.

The cross country course should be made up of exclusively Ev100 fences. If fences have to be shared with 1* obstacles, they must be within the Ev100 dimensions.

The course should be inviting and flowing with obstacles evenly spaced throughout, thereby reducing long galloping stretches. The course as a whole must be consistent and demanding enough that a successful competitor could progress to 1* level with confidence, yet inviting enough to allow riders and horses, not yet ready for 1* to gain confidence. It needs to be recognised and understood that many riders do not have the ambition to progress above this level.

Competitors will be expected to jump the course in a rhythm over a variety of straightforward fences including going up and down slopes and undulations. At Ev100 time begins to become a factor in the context of the competition.

These guidelines are intended to create a base standard for South African Eventing 100 classes. Advice from a Technical Delegate is essential during the design, construction and alteration of courses.

Design and Construction

The variety of fence design and materials used in construction plays a significant part in educating horses and riders in what they will face as they progress through the different classes.

Courses should have a good balance of fences and the first six fences should encourage horses to jump confidently and in a rhythm. Obstacles should have ground lines (trees, plants not necessary a pole) with their jumpable width as wide and inviting as possible. There must be several fences with maximum top spread

Fences that restore confidence should be used after combinations or more difficult questions.

Some fence types and their suitability at Ev100 level are considered in **Table A**

1. Combinations and Related Distances

There should be up to **four combinations and related distances** within the course, excluding the water fence and not before fence No.4 (A combination is defined as elements with two or less non jumping strides in between. Related distances refer to distances above two non jumping strides.)

Combinations and related distances should be straight forward and inviting and can consist of up to three elements. Elements may be partially offset, parallel, or placed on a gentle curve.

Combinations should not be sited at the end of long galloping stretches, on a downhill slope or in an area with a confined access or exit. Avoid areas in shadow or with poor light. A slow measured approach should be the designer's aim.

At Ev100 the design of combinations and related distances should start to incorporate a variety of different obstacle profiles.

In introducing slightly more technical combinations and related distances, kinder profile obstacles should be used e.g. logs, in order to give a more positive experience. Avoid using fence types which can jump erratically and alter distances between elements e.g. brush fence as the first part of a combination.

Separately numbering obstacles, rather than ABC lettering, is a useful design tool to help the inexperienced and is strongly recommended where appropriate.

Distances

Bounce distances, on fences with height, should only be used at this level in a step combination. A step up to a fence on a bounce distance is acceptable (75% of max height), with an appropriate alternative.

2) Alternatives

Alternatives should only be used where necessary. Where they are considered necessary, they should be asking the same type of question, if possible, as the direct route e.g. accuracy, be the same in construction (where possible) and be easier and more time consuming to execute.

3) Water Obstacles

Ev100 competitors can be expected to negotiate a variety of options.

Water

- 1) A simple log into water is allowed, but must be of a suitable height to encourage the horses into the water.
- 2) Competitors can be expected to jump down into water off a step,. Any jumping effort into water should have no significant height (below 30cm) i.e. Pole on top of step should be below 30cm in height.
- 3) A Step out of water is acceptable provided it is significant in height (0.75m). The placing of a pole at the base of the step and painting the top of the step a defining colour can prove to be helpful.

Obstacles before water

- 1) Obstacles placed before a **ramp** into water, should be on one non jumping stride or more. Fence profiles must be sympathetic. Maximum height fences should be avoided

2) Obstacles placed before a **step** into water, should be on two non jumping strides from the edge of step. Fence profiles must be sympathetic. Maximum height fences should be avoided

Obstacles after Water

An inviting solid jump out of the water is allowed.

Obstacles after a water complex can be placed after a ramp or step out. Obstacles should be on one non jumping stride or more.

NO jumps in water. The depth of water (max 0.20m) is not the test.

4) Narrow Fences

The education started at Ev90, should be built upon and we should be setting the horse and rider an increased test of accuracy and honesty, but still allowing for the inexperienced members of the partnership. There should be a maximum of 3 minimum jumpable width fences. (Jumpable width is defined as “between the flags”)

The minimum jumpable width should be **1.80m wide**. This can be made more inviting with the use of trees and dressing to create an impression of width. Some help can be given but learning to negotiate narrow fences is essential for progress.

Fences whose jumpable widths reduce from back to front i.e. triple brushes, arrow heads should have a front face jumpable width of a minimum of 50% of the back. E.g. a 1.8m wide triple brush at the back, should taper to a minimum of 0.90m. Base spread should not exceed 75% of maximum allowed.

5) Tables

All tables should either be filled in with a sloping front face, with such face sloping away from the horse on the take off side of the fence (this would be appropriate for the traditional sleeper tables or churn stands) or, in the case of picnic tables, the top line should have a vertical face of at least 0.25m and there should be a seat in front of the table, also with a vertical face of at least 0.25m.

Seats must not be placed on the landing side of the table, as this may present a false ground line.

6) Verticals

Verticals/uprights should not be sited, where it is possible for many riders/horses to approach them too fast.

7) Core Elements

Table A identifies fence types for inclusion in Ev100 courses and recommendations for construction and design. Fence types highlighted (Bold in italics) are considered to be core elements to Ev100 classes and each cross country course should have at least **4 different core fence types**.

Table A – Eventing 100 Design Guidelines

Jumping Efforts	18 to 28
Course Length	2200 to 2800m
Speed	490m per minute

Dimension of Obstacles

Max Height	1.00m
Max spread at Highest Point	1.10m
Max Base Spread	1.80m
Max Spread (without height)	1.80m
Max Drop	1.50m
Maximum depth of water	0.20m

Fence Type	Appropriate	Suggested Dimensions	Notes
Verticals & Palisades	Yes	Base spread min 30cm Recommended 50cm	See main notes
Parallels	Yes	Back rail minimum 5cm higher than front	
Table Top Type	Yes	Back min 5cm Higher than front	See main notes
Bench/Chairs	Yes	Height at front 45cm Base spread 1.35m	A min of 10 degree slope on back of seat The slope from front of seat to top of bench to b 40/50 degrees.
Round Tops	Yes	Base spread 1.50m	
Brush Box	Yes	Min of 0.25m of brush Height of solid part of fence 0.90m	
Bullfinch	Yes	Light type	
Feeder	Yes	Base spread 1.50m	Filled with straw Good ground line
Ramps	Yes		Recommended 40/50 degree slope
Steps*	Yes	1. Single step height 1.00m 2. 2 steps as part of combination height 0.90m 3. 3 steps – height 0.90m No bounce on descent Associate fences can be used after steps Distances not less than 9.10m	Avoid using fences before a step up. Fences associated before a step down, on a distance not less than 9.10m
Trakehner	Yes	Base spread 1.50m, min jumpable width 3.6m	Ground Line essential Shallow ditch essential
Water	Yes	Step In drop 0.75m Step Out height 0.75m Min width of water crossing to be 6.00m	See main notes
Brush to Open Ditch	Yes	Min 0.25m of brush, height of solid part of fence 1.00m Ditch should be not less than 0.60m deep	Ground line essential Not recommended within a combination

		Base spread 1.50m Min jumpable width 3.6m	
Half Coffin	Yes	Recommended two non jumping strides between elements. Well defined Ditch min jumpable width 3.6m	Jumping element can be before or after ditch. Ditch to be well defined
Open Ditch	Yes	Min jumpable width 3.6m	Clear ground line
Full Coffin	Yes	A Element- height 0.90m min 9.10m between fence & ditch (flat ground) B Element – spread 1.00m min 6.40m between ditch & fence (flat ground)min jumpable 3.6m C Element – height 1.00m	
Sunken Road	Yes		With advise from TD Consider approach & dimensions
Bounces	No		
Corners	Yes	Top spread max 1.10m measured 1.20m in from point of corner Back to be minimum 5cm higher than front Suggest 30 degree angle	Decking of corner – not essential Steps must be taken to ensure corner is not jumped where it is too wide
Log Piles	Yes		
Banks	Yes	No bounce distances	Clear defined jump off
Drop Fences	Yes		If possible never into flat ground.
Elephant Traps	Yes	Base spread not more than 75% of max -1.35m Min jumpable width 3.6m	Slope to be 40 to 50 degrees to discourage a flat obstacle.
Zig Zag	Yes	Min jumpable width 3.6m	
Roofs & Keyholes	Yes	Any fixed barrier above the obstacle must be a min of 3.36m above the ground level.	Provided there is ample space. Should be seen as decorative not a jumping test.
Narrow Fences	Yes	Min 1.80m	See main notes
Helsinki Steps	Yes	2.40m sections	On gentle slope only
Steps	Yes	Single step height 0.70m	
Sharks Teeth	Yes		
Triple Bars	Yes	Base spread 1.35m	
Gates	Yes		

