

### **COMPARISON OF MAPPING SPECIFICATIONS**

### **MAN-MADE FEATURES**

Green = symbol change, map needs to change. Yellow = symbol change, gets smaller. Blue = symbol change, gets bigger or more frequent.

Pink = ISOM 2017 and ISSprOM differ. Red = symbol different, fix when field checking map. Olive green = not sure about this change in symbol.

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
The track network provides important information for the runner and the classification must be clearly recognisable on the map. Particularly important for the competitor is the classification of smaller paths. Account must be taken not only of the width, but also of how obvious the path is to the runner.	The road and track network provides important information for the competitor and the classification must be clearly recognisable on the map. Of particular importance to the competitor is the classification of smaller paths. Account must be taken not only of the width but also of how obvious the path is to the competitor.  Some man-made features constitute obstacles or barriers to the competitor and must be easily identifiable on the map. Important examples are fences, walls, buildings and forbidden areas.	[No introductory text]	[No introductory text]
Other man-made features are also important both for map reading and as	Other man-made features are important both for map reading and for		
control points.	control points.		

529 Paved area	501 Paved area (A)	529 Paved area	501 Paved area (A)
An area of hard standing used for	An area with a firm surface such as	A paved area is an area with a firm level	A paved area is an area with a firm
parking or other purposes.	asphalt, hard gravel, tiles, concrete or	surfaces such as asphalt, hard gravel,	surface such as asphalt, hard gravel,
	the like.	tiles, concrete or the like.	tiles, concrete or the like.
	Paved areas should be bordered (or	It should be bordered (or framed) by	It should be bordered (or framed) by
	framed) by a thin black line where they	the symbol step or edge of paved area	the symbol Step or edge of paved area
	have a distinct boundary.	(529.1).	(501.1).
		Distinct differences within the paved	Distinct differences within the paved
		area can be represented with the	area can be represented with the
		symbol step or edge of paved area	symbol Step or edge of paved area
		(529.1), if they serve navigation.	(501.1), if they serve navigation.
		The black border line can be omitted	The black border line can be omitted
		where it is logical (e.g.	where it is logical (e.g. indistinct /
		indistinct/gradual gravel-to-grass	gradual gravel-to-grass transitions).
		transitions).	
		Where a paved road, footpath or track	Differences in the brown colour shall be
		goes through a non-urban area, the	used to show differences in the traffic
		brown fill-in shall be drawn darker, so	of vehicles or pedestrians.
		that if (x)% brown is used in urban	
		areas, (x+20)% brown shall be used in	
		the non-urban areas, and the line width	
		of the black outline shall be increased	
		from 0.07 to 0.14 mm.	
	Minimum area: 1 mm x 1 mm		
	(footprint 15 m x 15 m).		
Colour: black and brown 50% (60	Colour: brown 50%, black.	Colour: brown:	Colour: brown 30% for light traffic of
lines/cm).		0 (white), 10%, 20% or 30% (urban) /	vehicles or pedestrians, 50% for heavy
		20%, 30%, 40%, 50% (non- urban)	traffic of vehicles or pedestrians, black
		(min. 60 lines/cm), black; the colour	the colour and the line width shall be
		and the line width shall be the same as	the same as for symbol <i>Unpaved</i>
		for symbol <i>unpaved footpath or track</i>	footpath or track (505).
Black line width: 0.12mm	Black line width: 0.14mm	(506.1).	
Sidek inic Widen O.12iiiii	Brack fine width. 0.14fillii	Black line width: 0.07mm urban, 0.14	Black line width: 0.1mm
		non-urban	

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
[no separate symbol Black line width (edge of paved area in 529): 0.12mm]	[no separate symbol Black line width (edge of paved area in 501): 0.12mm]	529.1 Step or edge of paved area [with a sentence on stairways omitted] A step or an edge of a paved area. Edges within paved areas are generally not represented, unless they serve navigation. The thickness of edge of paved areas shall be enlarged to 0.14 mm in non-urban areas to improve legibility. The thickness of step lines shall always be 0.07 mm.	501.1 Step or edge of paved area (L)  An edge of a paved area. Edges within paved areas are generally not represented, unless they serve navigation. Line width: 0.1mm
[no symbol]	[no symbol]	Colour: black. [no symbol]	Colour: black.  501.2 Paved area in multilevel structures (A) Part of a multilevel structure which can be passed at two levels. The angle of the pattern is approximately 45° to the direction of the axis of the paved area. Colour: brown 30% or 50%, white (If upper level is covered by another surface, that symbol shall occur with the same pattern). Width of stripes: 0.3mm The drawing shows a bridge with 0.6mm line width. The bridge symbol has a line width of 0.4mm. I'm not sure if the difference is deliberate.

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
[no symbol]	[no symbol]	[no symbol]	501.3 Paved area with scattered trees (A)  Area with scattered trees or bushes in a paved area.  Minimum width: 2.2 mm  Minimum area: 6.25 mm2 (footprint 100 m2) Smaller areas must be left out, exaggerated or shown using the symbo Paved area (501)
			Colour: brown 30% (50%) with holes of white at a 45 degree angle. White dot diameter: 0.6mm Gap between dots: 0.75mm (CC)

### 501 Motorway

A road with two carriageways. The width of the symbol should be drawn to scale but not smaller than the minimum width. The outer boundary lines may be replaced with symbols 519, 521, 522 or 524 if a fence or wall is so close to the motorway edge that it cannot practically be shown as a separate symbol. The space between the black lines must be filled with brown (50%). A road under construction may be shown with broken lines.

### 502 Major road

Road wider than 5m. The width of the symbol should be drawn to scale but not smaller than the minimum width. The outer boundary lines may be replaced with symbols 519, 521, 522 or 524 if a fence or wall is so close to the motorway edge that it cannot practically be shown as a separate symbol. The space between the black lines must be filled with brown (50%). A road under construction may be shown with broken lines.

#### 503 Minor road

Road 3-5 m wide. The space between the black lines must be filled with brown (50%).

A road under construction may be shown with broken lines.

Colour: black and brown 50% (60 lines/cm).

Black line width: 0.18mm

### 502 Wide road (L)

The width should be drawn to scale, but not smaller than the minimum width (0.3 + 2\*0.14 mm - footprint 8.7 m). The outer boundary lines may be replaced with other black line symbols, such as symbol *Fence* (516), *Impassable fence* (518), *Wall* (513) or *Impassable wall* (515) if the feature is so close to the road edge that it cannot practically be shown as a separate symbol. The space between the black lines is filled with brown (50%).

A road with two carriageways can be represented using two wide road symbols side by side, keeping only one of the road edges in the middle.

Colour: black, brown 50%.

Black line width: 0.14mm

[ISSOM uses the paved area symbol]

[ISSprOM uses the paved area symbol]

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
Motorway brown infill min width:	Brown infill min width: 0.3mm		
0.3mm			
Major road brown infill min width:			
0.5mm			
Minor road brown infill width: 0.3mm			
Road under construction dash: 3.0mm			
Road under construction gap: 0.25mm			
504 Road	503 Road (L)	[ISSOM uses the paved area symbol]	[ISSprOM uses the paved area symbol]
A maintained road suitable for motor	A maintained road suitable for motor		
vehicles in all weather.	vehicles in all weather.		
Width less than 3 m.	Width less than 5 m.		
Colour: black.	Colour: black.		
Line width: 0.35mm	Line width: 0.35mm		
505 Vehicle track	504 Vehicle track (L)	[ISSOM uses the paved area symbol]	[ISSprOM uses the paved area symbol]
A track or poorly maintained road	A track or poorly maintained road		
suitable for vehicles only when	suitable for vehicles only when		
travelling slowly.	travelling slowly.		
510 Visible path junction	For distinct junctions the dashes of the		
When a junction or intersection of	symbols are joined at the junction.		
paths or tracks is visible, the dashes of			
the symbols are joined at the junction.			
511 Indistinct junction	For indistinct junctions the dashes of		
When a junction or intersection of	the symbols are not joined.		
paths or tracks is not clear, the dashes			
of the symbols are not joined.			
Width less than 3 m.			
	Minimum length (isolated): two dashes		
	(6.25 mm - footprint 94 m).		
Colour: black.	Colour: black.		
Line width: 0.35mm	Line width: 0.35mm		
Dash length: 3.0mm (includes gap)	Dash length: <mark>3.0mm</mark>		
Gap length: 0.25mm	Gap length: 0.25mm		

506 Footpath A large path, or old vehicle track, which is distinct on the ground. 510 Visible path junction When a junction or intersection of paths or tracks is visible, the dashes of the symbols are joined at the junction. 511 Indistinct junction When a junction or intersection of paths or tracks is not clear, the dashes of the symbols are not joined. Width less than 3 m.	S05 Footpath (L) An easily runnable path, bicycle track or old vehicle track. For distinct junctions the dashes of the symbols are joined at the junction.  For indistinct junctions the dashes of the symbols are not joined.	506.1 Unpaved footpath or track An unpaved footpath or rough vehicle track is a way for passing mainly by foot, without a smooth, hard surface.	505 Unpaved footpath or track (L) An unpaved footpath or rough vehicle track is a way for passing mainly by foot, without a smooth, hard surface.
		The density of the brown fill-in shall be the same as the density chosen for the symbol paved area (529).  To improve the legibility of this symbol in non-urban parts of the map, the line width shall, in the non-urban parts of the map, be increased from 0.07 mm to 0.14 mm, and the brown fill-in shall, in the non-urban parts of the map, be drawn darker, so that if (x)% brown is used in urban parts of the map, (x+20)% brown shall be used in the non-urban parts of the map.	The colour and the line width shall be the same as for the symbols <i>Paved area</i> (501) and <i>Step or edge of paved area</i> (501.1).
Colour: black.	Minimum length (isolated): two dashes (4.25 mm - footprint 64 m) Colour: black.	Colour: black, brown	Min length: two dashes (4.25mm)  Colour: black, brown 30%.
Coloui. Black.	Colour. Black.	0 (white), 10%, 20% or 30% (urban) 20%, 30%, 40%, 50% (non-urban) (min. 60 lines/cm); the colour and the line width shall be the same as for the symbols paved area (529) and step or edge of paved areas (529.1).	Colour. Stack, Diowil 3076.
Line width: 0.25mm	Line width: 0.25mm	Black line width: 0.07 or 0.14mm	Black line width: 0.1mm
Dash length: 2.0mm (includes gap)	Dash length: 2.0mm	Dash length: 2.0mm	Dash length: 2.0mm

ISOM 2000	ISOM 2017-2 (Adjusted version	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January
	published January 2019)		2020, with errata)
Gap length: 0.25mm	Gap length: 0.25mm	Gap length: 0.25mm	Gap length: 0.25mm
		Brown infill min width: 0.35mm	Brown infill min width: 0.35mm
507 Small path	506 Small footpath (L)	507 Small unpaved footpath or track	506 Small unpaved footpath or track (L)
A small path or (temporary) forest extraction track which can be followed at competition speed.  510 Visible path junction  When a junction or intersection of paths or tracks is visible, the dashes of the symbols are joined at the junction.  511 Indistinct junction  When a junction or intersection of	A runnable small path or (temporary) forest extraction track which can be followed at competition speed. For distinct junctions the dashes of the symbols are joined at the junction.  For indistinct junctions the dashes of the symbols are not joined.	A small unpaved footpath or track.	A small unpaved footpath or track.
paths or tracks is not clear, the dashes of the symbols are not joined.		Not to be used in urban areas.	
	Minimum length (isolated): two dashes		Minimum length (isolated): two dashes
	(2.25 mm - footprint 34 m).		(3.4 mm - footprint 13.6 m).
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Line width: 0.18mm	Line width: 0.18mm	Line width: 0.18mm	Line width: <mark>0.27mm</mark>
Dash length: 1.0mm	Dash length: 1.0mm	Dash length: 1.0mm	Dash length: 1.5mm
Gap length: 0.25mm	Gap length: 0.25mm	Gap length: 0.25mm	Gap length: 0.37mm

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
508 Less distinct small path	507 Less distinct small footpath (L)	508 Less distinct small path	507 Less distinct small path (L)
A less distinct small path or forestry	A runnable less distinct / visible small	A less distinct path or forestry	A less distinct path or forestry
extraction track.	path or forestry extraction track.	extraction track.	extraction track.
		Not to be used in urban areas.	
	Minimum length: two sections of		Minimum length: two sections of
	double dashes (5.3 mm – footprint		double dashes (7.9 mm – footprint
	79.5 m).		31.6 m).
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Line width: 0.18mm	Line width: 0.18mm	Line width: 0.18mm	Line width: 0.27mm
Dash length: 1.0mm [probably]	Dash length: 1.0mm	Dash length: 1.0mm	Dash length: 1.5mm
Small gap length: 0.25mm	Small gap length: 0.25mm	Small gap length: 0.25mm	Small gap length: 0.37mm
Large gap length: 1.0mm	Large gap length: 0.8mm	Large gap length: 1.0mm	Large gap length: 1.5mm

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
509 Narrow ride	508 Narrow ride or linear trace	509 Narrow ride	508 Narrow ride (L)
A distinct ride, less than ca. 5 m wide.	through the terrain (L)	A distinct ride is a linear break in the	A distinct ride is a linear break in the
A ride is a linear break in the forest	A forest ride or a prominent trace	forest (usually in a plantation), which	forest (usually in a plantation), which
(usually plantation) which does not	(forestry extraction track, sandy track,	does not have a distinct path along it.	does not have a distinct path along it.
have a distinct path along it.	ski track) through the terrain which		
	does not have a distinct runnable path		
	along it.		
Where there is a path along a ride,		Where there is a path along a ride, the	Where there is a path along a ride, the
symbols 507 or 508 should be used in		symbol small unpaved footpath or track	symbol Small unpaved footpath or track
place of symbol 509.		(507) shall be used.	(506) shall be used.
	Runnability is shown using a slightly		
	thicker line of yellow, green or white as		
	background. Without outline: the same		
	runnability as the surroundings.		
	Yellow 100%: easy running.		
	White in green: normal runnability.		
	Green 30%: slow running.		
	Green 60%: walk.		
		Not to be used in urban areas.	
	Minimum length: two dashes (3.25 mm		Minimum length: two dashes
	- footprint 48 m).		(9.75 mm - footprint 39 m).
Colour: black.	Colour: black + white/green/yellow.	Colour: black.	Colour: black.
Line width: 0.14mm	Line width: 0.14mm	Line width: 0.14mm	Line width: 0.21mm
Dash length: 3.0mm	Dash length: <mark>2.0mm</mark>	Dash length: 3.0mm	Dash length: <mark>4.5mm</mark>
Gap length: 0.5mm	Gap length: 0.25mm	Gap length: 0.5mm	Gap length: <mark>0.75mm</mark>
	Min width runnability colour: 0.45mm		

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
	published January 2019)		2020, with errata)
515 Railway	<b>509</b> Railway <b>(L)</b>	515.1 Railway	509.1 Railway (L)
A railway or other kind of railed track	A railway or other kind of railed track.	A railway is a permanent track laid with	A railway is a permanent track laid with
(tramway, truckway, etc.).		rails on which locomotives, carriages or	rails on which locomotives, carriages or
	If it is forbidden to run along the	wagons can travel.	wagons can travel.
	railway, it shall be combined with		
	symbol Out-of-bounds route (711).		
	If it is forbidden to cross or run along	If it is forbidden to cross or run along	If it is forbidden to cross or run along
	the railway, it must be combined with	the railroad, the forbidden area around	the railroad, the forbidden area around
	symbol Area that shall not be entered	the railway shall be represented with	the railway shall be represented with
	(520) or Out-of-bounds area (709).	symbol area with forbidden access	symbol Area that shall not be entered
		(528.1).	(520).
	Minimum length (isolated): two dashes		Minimum length (isolated): two [black]
	(4 mm - footprint 60 m).		dashes (4 mm - footprint 16 m).
Colour: black.	Colour: black, white.	Colour: black.	Colour: black, white.
Main line width: 0.35mm	Outside line width: 0.1mm	Outside line width: 0.1mm	Outside line width: 0.1mm
Cross line width: 0.35mm	Gap between outside lines: 0.35mm	Gap between outside lines: 0.35mm	Gap between outside lines: 0.35mm
Length of cross line from each side of	(CC)		(CC)
main line: 0.35mm	Length of black centre infill: 1.5mm	Length of black centre infill: 1.5mm	Length of black centre infill: 1.5mm
Gap between cross lines: 3.0mm [CC]	Length of white centre infill: 1.0mm	Length of white centre infill: 1.0mm	Length of white centre infill: 1.0mm
[Tramways on streets are not shown on	[Tramways on streets are not shown on	515.2 Tramway	509.2 Tramway (L)
an ISOM map]	an ISOM map.]	A tramway is a public vehicle running	A tramway is a public vehicle running
		regularly along certain streets, usually	regularly along certain streets, usually
		on rails. The track can be easily crossed	on rails. The track can be easily crossed
		by the competitor. Tramways are	by the competitor. Tramways are
		generally not represented. However, if	generally not represented. However, if
		they serve navigation or orientation,	they serve navigation or orientation,
		they can be represented.	they can be represented.
		Colour: black 50%.	Colour: black 50%.
		Outside line width: 0.1mm	Outside line width: 0.1mm
		Gap between outside lines: 0.3mm	Gap between outside lines: 0.3mm

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
ı	published January 2015)		2020, with errata)
516 Power line	510 Power line, cableway or skilift (L)	516 Power line, cableway or skilift	510 Power line, cableway or skilift (L)
Power line, cableway or skilift.	Power line, cableway or skilift.	Power line, cableway or skilift.	Power line, cableway or skilift.
The bars indicate the exact location of	The bars show the exact location of the	The bars indicate the exact location of	The bars indicate the exact location of
the pylons.	pylons.	the pylons.	the pylons.
	The line may be broken to improve legibility.		
	If a section of a power line, cableway or		If a section of a power line, cableway or
	skilift goes along a road or path (and		skilift goes along a road or path (and
	does not offer significant additional		does not offer significant additional
	navigational value) it should be		navigational value) it should be
	omitted.		omitted.
	Minimum length (isolated): 5 mm		Min length: must include two cross bars
	(footprint: 75 m). [Drawing shows two		(pylons)
	pylons as min length]		
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Line width: 0.14	Main line width: 0.14	Main line width: 0.14	Main line width: 0.14
	Cross bar line width: 0.14		Cross bar line width: 0.14
Cross bar length: 0.3mm	Cross bar length: 0.3mm	Cross bar length from main line: 0.3mm	Cross bar length from main line: 0.3mm
		(OM)	(OM)

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
517 Major power line	511 Major power line (L, P)	517 Major power line	511 Major power line (L)
Major power lines should be drawn	Major power lines should be drawn	Major power lines should be drawn	Major power lines should be drawn
with a double line.	with a double line.	with a double line.	with a double line.
The gap between the lines may indicate the extent of the powerline.	The gap between the lines may indicate the extent of the power line.	The gap between the lines may indicate the extent of the powerline.	The gap between the lines may indicate the extent of the powerline.
	The lines may be broken to improve legibility.		
	The bars show the exact location of the pylons.		
	Very large carrying masts shall be	Very large carrying masts shall be	Very large carrying masts shall be
	represented in plan shape using outline	represented in plan shape or with the	represented in plan shape using outline
	of symbol <i>Building</i> (521) or with symbol <i>High tower</i> (524).	symbol <i>high tower</i> (535).	of symbol <i>Building</i> (521) or <i>High tower</i> (524).
		In this case, the cable lines can be left	In this case, the cable lines can be left
		out (the map shows only the pylons).	out (the map shows only the pylons).
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Line width: 0.14	Double Lines - width: 0.14	Line width: 0.14	Double Lines - width: 0.14
	Min gap between lines: 0.4mm (CC)	Min gap between lines: 1.5mm	Min gap between lines: 1.5mm
Cross bar length (extending beyond	Cross bar length (extending beyond	Cross bar length (extending beyond	Cross bar length (extending beyond
double lines): 0.3mm	double lines): 0.3mm (OM)	double lines): 0.3mm	double lines): 0.3mm (OM)
	Cross bar line width: 0.2mm		Cross bar line width: 0.2mm
	Option to use building outline to show		Option to use building outline to show
	pylon – line width 0.2mm, square with		pylon – line width 0.2mm, square with
	sides 0.8mm long (OM)		sides 0.8mm long (OM)
512 Footbridge	512 Bridge / tunnel (L, P)	512.1 Bridge	512.1 Bridge (P)
513 Crossing point with bridge		518.1 Underpass or tunnel	512.2 Underpass or tunnel (L)
514 Crossing point without bridge			
518 Tunnel			

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
[Small bridge with no path]	[Small bridge with no path]	[Small bridge with no path]	[Small bridge with no path
A footbridge with no path leading to it.	A small footbridge with no path leading to it is represented with a single dash.		[Use the bridge symbol 512.1]
Colour: black.	Colour: black.		
Line width: 0.25mm	Line width: 0.25mm		
Line length: 0.5mm either side of the	Line length: 0.5mm (OM) [either side of		
water symbol	the water symbol]		
[Track/stream crossing point with bridge]	[Track/stream crossing point with bridge]	[Track/stream crossing point with bridge]	[Track/stream crossing point with bridge]
A path or track crossing a river, stream	Small bridges connected to a track/path		[can be used with 506 Small Footpath
or ditch by a bridge.	are shown by centring a track dash on the crossing.		and 507 Less Distinct Small Footpath]
Colour: black.			
[Shown as a track symbol with dash			
centred on a crossable watercourse.]			
[Track/stream crossing point without	[Track/stream crossing point without	[Track/stream crossing point without	[Track/stream crossing point without
bridge]	bridge]	bridge]	bridge]
A path or track crossing a river, stream	Tracks/paths are broken for water		[can be used with 506 Small Footpath
or ditch without a bridge.	course crossings without bridges.		and 507 Less Distinct Small Footpath]
Colour: black.			
[Shown as a path with a gap where it			
crosses a crossable watercourse.]			

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
[Bridge & short underpass]	[Bridge & short underpass]	[Bridge & short underpass]	[Bridge & short underpass]
A way under roads, railways, etc. which	Bridges and tunnels are represented	A bridge is a structure spanning and	A bridge is a structure spanning and
may be used by the runner. This symbol	using the same basic symbols.	permitting passage over a river, chasm,	permitting passage over a river, chasm,
is used whether or not the tunnel has a track leading to it.	If it is not possible to get through a tunnel (or under a bridge), it shall be omitted. I'm not sure about this. If you have a bridge over a lake and you can't walk under it, should you omit it?	road or the like.	road or the like.
Colour: black.	Colour: black.	Colour: black.	Colour: black.
[Shown as two black V or 'cup' shapes	[Shown as two black 'cup' shapes with	[Shown as two black square brackets	[Shown as two black square brackets
with the openings showing the outside of the bridge.] [Minimum length not specified for cup	the openings showing the outside of the bridge.] Minimum length (of baseline): 0.4 mm	with the opening side showing the outside of the bridge.]	with the opening side showing the outside of the bridge.]
shape]	(footprint 6 m).		
Line extends 0.6mm beyond road.  Angle of line: 60 degrees	Line extends <mark>0.4mm</mark> beyond road.  Angle of line: 60 degrees	Perpendicular line length: 0.47mm	Perpendicular line length: 0.6mm
Line width: 0.18mm	Line width: 0.18mm	Line width: 0.25mm	Line width: <mark>0.4mm</mark>
		Gap between parallel lines: min 0.4mm	Gap between parallel lines: min 0.4mm If underpasses under bridges are to be used in a competition, they shall be emphasized with the symbol <i>Crossing point</i> (710.1) or <i>Crossing section</i> (710.2).

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
[Long tunnel or underpass]	[Long tunnel or underpass]	[Long tunnel or underpass]	[Long tunnel or underpass]
		An underpass or a tunnel is a passage running underneath the ground,	An underpass or a tunnel is a passage running underneath the ground or a
		especially a passage for pedestrians or	building, especially a passage for
		vehicles, crossing under for instance a	pedestrians or vehicles.
		railroad or a road.	
			Minimum length (of baseline): 2
		Colour: black.	squares (0.75 mm - footprint 3.0 m).
		Square dots: 0.25x0.25mm	Colour: black.
		Distance between dots: 0.5mm [CC]	Square dots: 0.25x0.25mm
			Distance between dots: 0.5mm (CC)
		If underpasses or tunnels etc. are to be	If underpasses or tunnels etc. are to be
		used in a competition, they shall be	used in a competition, they shall be
		emphasized with the symbol crossing	emphasized with the symbol Crossing
		point (708) or crossing section (708.1).	point (710.1) or Crossing section (710.2).

513 Wall (L)		*
J_J 114.1 ( <i>L)</i>	519 Passable stone wall	513.1 Passable wall (L)
A significant wall of stone, concrete,	A stone wall or stone faced bank.	A passable wall is a construction made
wood or other materials.	This symbol shall be used only in non- urban areas.	of stone, brick, concrete etc., which can be passed.
Minimum height: 1 m.		
	If such a wall is higher than 2 m, it shall be represented with the symbol impassable wall (521.1).	If such a wall is higher than 1.5 m, it shall be represented with the symbol Impassable wall (515). Wide walls shall be drawn in plan shape using a ground symbol delineated by the passable wall symbol. It should be dotted if possible (minimum length around the dot 0.4 mm each side). I do not understand this. Wouldn't a wide wall drawn in plan shape have a retained wall outline and the
Minimum length (isolated): 1.4 mm (footprint 21 m). Must have at least one dot. Colour: black. Line width: 0.14mm Diameter of dots along the line: 0.4mm Distance between the dots: 2.0mm (CC)	Colour: black Line width: 0.21mm Diameter of dots along the line: 0.6mm Distance between the dots: 3.75mm [CC]	appropriate area symbol inside it? Minimum length (isolated): 1.4 mm (footprint 5.6 m). Must have at least one dot. Colour: black. Line width: 0.21mm Diameter of dots along the line: 0.6mm Distance between the dots: 3.75mm (CC)
M (ffd C Li D D	Ainimum height: 1 m.  Ainimum length (isolated): 1.4 mm  Tootprint 21 m). Must have at least one ot.  olour: black.  ine width: 0.14mm  viameter of dots along the line: 0.4mm	This symbol shall be used only in non-urban areas.  If such a wall is higher than 2 m, it shall be represented with the symbol impassable wall (521.1).  In imimum length (isolated): 1.4 mm footprint 21 m). Must have at least one ot.  In olour: black. In a width: 0.14mm footprint 21 m) is an evidence of dots along the line: 0.4mm footprint 21 m). This symbol shall be used only in non-urban areas.  If such a wall is higher than 2 m, it shall be represented with the symbol impassable wall (521.1).  Colour: black Line width: 0.21mm Diameter of dots along the line: 0.6mm Distance between the dots: 3.75mm [CC]

ISOM 2000	ISOM 2017-2 (Adjusted version	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January
	published January 2019)		2020, with errata)
		519.1 Passable wall	
		A passable wall or retaining wall is a	
		construction made of stone, brick,	
		concrete etc., which can be passed. This	
		symbol is suitable for urban areas. If	
		such a wall is higher than 2 m, it shall be	
		represented with the symbol	
		impassable wall (521.1). Wide walls	
		shall be drawn in plan shape.	
		Colour: black 50%.	
		Min line width: 0.35mm	

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
	[Use 513 wall symbol]		513.2 Passable retained wall (L) Retained wall is not a term in English. Retaining wall is used in 515. Use retaining wall in the legend. A passable wall which is seen only from one side. Half dot must point to the lower level. Height is 0.6 - 1.5 m. If lower, use symbol Step or edge of paved area (501.1). The average M21E will go dowr a 1.6m high retaining wall without breaking stride; it might be worth highlighting the location of such walls for course setters. Minimum length (isolated): 2.4 mm (footprint 9.6 m). Must have at least one dot. Colour: black. Line width: 0.21mm Diameter of half dots along the line: 0.6mm Distance between the half dots: 1.9mm (CC)

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
520 Ruined stone wall	514 Ruined wall (L)	No symbol	No symbol
A ruined stone wall may be shown by a	A ruined or less distinct wall.		
dashed line.	Minimum height 0.5 m.		
	Minimum length: two dashes (3.65 mm		
	- footprint 55 m). If shorter, the symbol		
	must be exaggerated to the minimum		
	length or changed to symbol Wall (513).		
Colour: black.	Colour: black.		
Line width: 0.14mm	Line width: 0.14mm		
Diameter of dots along the line: 0.4mm	Diameter of dots along the line: 0.4mm		
Distance between the dots: 2.5mm [CC]	Distance between the dots: 2.0mm (CC)		
Length of gap between dashes: 0.25mm	Length of gap between dashes: 0.35mm		

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
521 High stone wall	515 Impassable wall (L)	521.1 Impassable wall (forbidden to	515 Impassable wall (L)
A stone wall higher than ca 1.5 m, not crossable to the average orienteer.	An impassable or uncrossable wall, normally more than 1.5 m high.	cross) An impassable wall or retaining wall is a wall, which fulfil the function of an enclosure or solid barrier. It shall not be crossed, due to forbidden access or because it may constitute a danger to the competitor due to its height. It is forbidden to cross an impassable wall! Competitors violating this rule will be disqualified. Very wide impassable walls shall be	An impassable or uncrossable wall or retaining wall is a wall, which fulfil the function of an enclosure or solid barrier.  It shall not be crossed. [OA Rule 17.2 says competitors shall not cross a feature drawn with an Impassable wall symbol.]  Very wide impassable walls shall be
		drawn in plan shape and represented with the symbol <i>building</i> (526.1).	drawn in plan shape and represented with the symbol <i>Building</i> (521).
	Minimum length (isolated): 3 mm (footprint 45 m).	with the symbol bullarity (320.1).	with the symbol bulluing (321).
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Line width: 0.18mm	Line width: 0.25mm	Min line width: 0.4mm	Min line width: 0.4mm
Diameter of double dots along the line:	Diameter of double dots along the line:		
0.5mm	<mark>0.6mm</mark>		
Distance between sets of double dots:	Distance between sets of double dots:		
2.5mm [CC between closest dots]	3.0mm (CC) [between left dots]		
Distance between dots in a set of	Distance between dots in a set of		
double dots: 0.7mm [CC]	double dots: 0.8mm [CC]		

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
522 Fence	516 Fence (L)	522 Passable fence or railing	516 Passable fence or railing (L)
A wooden or wire fence less than ca.		A passable fence is a barrier enclosing	A passable fence is a barrier enclosing
1.5 m high.		or bordering a field, yard, etc., usually	or bordering a field, yard, etc., usually
		made of posts and wire or wood. It is	made of posts and wire or wood. It is
		used to prevent entrance or to confine	used to prevent entrance or to confine
		or mark a boundary. A railing is a	or mark a boundary. A railing is a
		fencelike barrier composed of one or	fencelike barrier composed of one or
		more horizontal rails supported by	more horizontal rails supported by
		widely spaced upright poles, usually it	widely spaced upright poles, usually it
		can be slipped through.	can be slipped through.
		If a fence or railing is higher than 2 m or	If a fence or railing is dangerous or very
		very difficult to cross, it shall be	difficult to cross, it shall be represented
		represented with the symbol	with the symbol <i>Impassable fence or</i>
		impassable fence or railing (524).	railing (518).
	If the fence forms an enclosed area,		
	tags should be placed inside.		
	Minimum length (isolated): 1.5 mm		Minimum length (isolated): 2.2 mm
	(footprint 22.5 m). Must have at least		(footprint 8.8 m). Must have at least
	one tag.		one tag.
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Main line width: 0.14mm	Main line width: 0.14mm	Main line width: 0.21mm	Main line width: 0.21mm
Tag line width: 0.14mm	Tag line width: 0.14mm	Tag line width: 0.14mm	Tag line width: 0.14mm
Tag line length: 0.5mm	Tag line length: 0.4mm	Tag line length: 0.75mm	Tag line length: 0.75mm
Tag line angle: 60 degrees	Tag line angle: 60 degrees	Tag line angle: 60 degrees	Tag line angle: 60 degrees
Distance between tags: 2.5mm	Distance between tags: 2.0mm	Distance between tags: 3.75mm	Distance between tags: 3.75mm

ISOM 2000	ISOM 2017-2 (Adjusted version	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January
	published January 2019)		2020, with errata)
523 Ruined fence	517 Ruined fence (L)	No symbol	No symbol
A ruined fence may be shown with a dashed line.	A ruined or less distinct fence.		
	If the fence forms an enclosed area,		
	tags should be placed inside.		
	Minimum length: two dashes (3.65 mm		
	- footprint 55 m). If shorter, the symbol		
	must be exaggerated to the minimum		
	length or changed to symbol Fence		
	(516).		
Colour: black.	Colour: black.		
Main line width: 0.14mm	Main line width: 0.14mm		
[Tag length: 0.5mm]	Tag length: <mark>0.4mm</mark> (OM)		
Dash length: 2.5mm	Dash length: 2.0mm (CC)		
Gap between dashes: 0.25mm	Gap between dashes: 0.35mm		

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January	
			2020, with errata)	
524 High fence	518 Impassable fence (L)	524 Impassable fence or railing	518 Impassable fence or railing (L)	
		(forbidden to cross)		
A boarded or wire fence higher than ca	An impassable or uncrossable fence,			
1.5 m, not crossable to the average orienteer, eg. deer fence.	normally more than 1.5 m high.			
	If the fence forms an enclosed area,			
	tags should be placed inside.			
		An impassable fence or railing, which	An impassable fence or railing shall not	
		shall not be crossed, due to forbidden	be crossed.	
		access or because it may constitute a		
		danger to the competitor because of its		
		height.		
		It is forbidden to cross an impassable	[OA Rule 17.2 says competitors shall	
		fence or railing. Competitors violating	not cross a feature drawn with an	
		this rule will be disqualified.	Impassable fence or railing symbol.]	
			If the minimum length is shorter than 3	
			mm, it must be presented with the	
	6		symbol <i>Impassable wall</i> (515).	
	Minimum length (isolated): 2 mm		Minimum length (isolated): 3 mm	
	(footprint 30 m). Must contain a pair of		(footprint 12 m).	
	tags.	Colour: black.	Colour blook	
Colour: black.	Colour: black.	Main line width: 0.4mm	Colour: black. Main line width: 0.4mm	
Main line width: 0.18mm	Main line width: 0.25mm			
Tag line width: 0.14mm	Tag line width: 0.14mm	Tag line width: 0.14mm	Tag line width: 0.14mm	
Tag line length: 0.5mm	Tag line length: <mark>0.4mm</mark> (OM)	Tag line length: 0.75mm Tag angle: 60 degrees	Tag line length: 0.75mm	
Distance between tone in pain O. Corre	Distance between tags in pairs 2 Crare		Tag angle: 60 degrees	
Distance between tags in pair: 0.6mm	Distance between tags in pair: 0.6mm	Distance between tags in pair: 0.9mm Distance between closest tags in two	Distance between tags in pair: 0.9mm Distance between right-hand tags in	
Distance between closest tags in two	Distance between closest tags in two			
pairs: 2.5mm	pairs: 2.5mm	pairs: 3.75mm	two pairs: 3.75mm	

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
525 Crossing point All ways through or over high fences or walls must be indicated. The symbol may also be used for a gate through or stile over a stone wall (519) or a fence (522) or a pipeline (534).	519 Crossing point (P) A way through or over a wall, fence or other linear feature, including a gate or stile.	525 Crossing point A crossing point is a gap or an opening in a fence, railing or wall, which can easily be passed through by a competitor.	519 Crossing point (optional) (P) A crossing point is a gap or an opening in a fence, railing or wall, which can easily be passed through by a competitor.
	For impassable features, the line shall be broken at the crossing point. For passable features, the line shall not be broken if passing involves a degree of climb.		
		Small gaps or openings which can not easily be passed through by competitors, shall not be represented on the map and shall be closed during the competition.	Small gaps or openings which cannot easily be passed through by competitors, shall not be represented on the map and shall be closed during the competition.
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Width of parallel lines: 0.18mm	Width of parallel lines: 0.18mm	Width of parallel lines: 0.25mm	Width of parallel lines: 0.25mm
Gap between lines: 0.6mm [CC] Length line extends beyond fence or wall symbol: 0.5mm	Gap between lines: 0.6mm (CC) Length of line: 1.0mm	Gap between lines: 0.9mm [CC] Length of line: 1.4mm	Gap between lines: 1.0mm (IM) Length of line: 1.4mm

#### 527 Settlement

Houses and gardens and other built up areas. Roads, buildings and other significant features within a settlement must be shown. If all buildings cannot be shown, an alternative symbol (black line screen) may be used.

### 528 Permanently out of bounds

Areas which are permanently forbidden to the runner are shown as out of bounds. The screen is superimposed on the normal map detail. A bounding line may be drawn if there is no natural boundary (see 709).

### Colour:

**Settlement 1:** yellow 100% and green 50% (60 l/cm)

**Settlement 2**: Alternatively black 32.5% (27 l/cm)

Black line width 0.12mm

### 520 Area that shall not be entered (A)

An out-of-bounds area is a feature such as a private house, a garden, a factory or another industrial area. Only contours and prominent features such as rail- ways and large buildings shall be shown inside an out-of-bounds area. Vertical black stripes may be used for areas where it is important to show a complete representation of the terrain (e.g. when a part of the forest is out-ofbounds). The area shall be discontinued where a path or track goes through. Out-of-bound areas with a clear border shall be bounded by a black boundary line or another black line, if the border is unclear no black line shall occur. Course planning symbol 709 can be used for temporary out-of bounds areas. The vertical black stripes version of the symbol is orientated to north. An out-of-bounds area shall not be entered.

### Minimum area: 1 mm x 1 mm (footprint 15 m x 15 m).

### Colour:

1. yellow [100%] + green 50%, Black boundary line width: 0.18mm or

**2.** black Black stripes:

Black line width: 0.25mm

### 528.1 Area with forbidden access (forbidden to cross)

An area with forbidden access such as a private area, a flower bed, a railway area etc.

No feature shall be represented in this area, except very prominent features such as railways, large buildings, or very large trees.

Road entrances shall be represented clearly.

Areas with forbidden access totally contained within buildings shall be mapped as being a part of the building.

# It is forbidden to cross an area with forbidden access. Competitors violating this rule will be disqualified.

Colour: yellow 100%, green 50%.

### 520 Area that shall not be entered (A)

An area that shall not be entered such as a private area, a flower bed, a railway area etc.

No feature shall be represented in this area, except very prominent features such as railways, large buildings, or very large trees.

Road entrances shall be represented clearly.

Areas that shall not be entered totally contained within buildings shall be mapped as being a part of the building.

The area shall always be delineated by a boundary line (at least 0.1 mm in width). The drawing in ISSprOM breaches this sentence.

[OA Rule 17.2 says competitors shall not cross a feature drawn with an Area that shall not be entered symbol.]

Minimum width: 0.25 mm (footprint 1 m)

Minimum area: 0.25 mm<sup>2</sup> (footprint 4 m<sup>2</sup>).

Colour: yellow 100%, green 50%.

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
Distance between black lines: 0.25mm	Distance between lines: 0.75mm (CC)		
	, ,		
Permanently out of bounds 1:	Black boundary line: 0.35mm		
black			
Black line width 0.25mm	[OA Rule 17.2 says competitors shall		
Distance between black lines: 0.5mm	not cross a feature drawn with an Area		
Black boundary line: 0.35mm	that shall not be entered symbol.]		
Permanently out of bounds 2:			
purple 33.3% (13.3 lines/cm) [= 709			
Out-of-bounds area; vertical stripes of			
purple].			

### 526 Building

A building is shown with its ground plan so far as the scale permits.

### 521 Building (A)

urban areas.

A building is shown with its ground plan so far as the scale permits. Buildings larger than 75 m x 75 m may be represented with a dark grey infill in

Passages through buildings must have a minimum width of 0.3 mm (footprint 4.5 m).

Buildings within forbidden areas are generalised.

Areas totally contained within a building shall not be mapped (they shall be represented as being part of the building).

Minimum gap indicating a passage between buildings and between buildings and other impassable features should be 0.4 mm.

## **526.1 Building (forbidden to pass through or over)**

A building is a relatively permanent construction having a roof.

Buildings within symbol area with forbidden access (528.1) may just be represented in a simplified manner. Areas totally contained within a building shall be mapped as being a part of the building.

The minimum gap between buildings and between buildings and other impassable features shall be 0.40 mm.

The black screen percentage should be chosen according to the terrain. A dark screen gives a better contrast to passable areas, such as streets, stairways and canopies, while a light screen makes contours and course overprint more clearly visible (which can be important in very densely built up urban terrain and in steep urban terrain). The black screen shall be the same for the whole map.

It is forbidden to pass through or over a building. Competitors violating this rule will be disqualified.

### 521 Building (A)

A building is a relatively permanent construction having a roof.

Buildings within symbol *Area that shall* not be entered (520) may just be represented in a simplified manner. Areas totally contained within a building shall be mapped as being a part of the building. A building shall not be entered.

The minimum gap between buildings and other impassable features shall be 0.40 mm.

Boundaries in touching buildings shall not be represented.

[OA Rule 17.2 says competitors shall not cross a feature drawn with a Building symbol.]

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
			Minimum width: 0.5 mm.
Minimum size: 0.5x0.5mm	Minimum area: 0.5 mm x 0.5 mm	Minimum size: 0.5x0.5mm	Minimum area: 0.25 mm² (footprint 4
	(footprint 7.5 m x 7.5 m).		m <sup>2</sup> ).
Colour: black.	Colour: black (or black (outline), black 60%).	Colour: black 50-65%, black.	Colour: black (outline), black 60%.
	Building Outline width: 0.2mm	Building outline width: 0.14mm	Building outline width: 0.14mm
No symbol	522 Canopy (A)	526.2 Canopy	522 Canopy (A)
	An accessible and runnable area with	A canopy is a building construction	A canopy is a building construction
	roof.	(with a roof), normally supported by	(with a roof), normally supported by
		pillars, poles or walls, such as passages,	pillars, poles or walls, such as passages,
		gangways, courts, bus stops, gas	gangways, courts, bus stops, gas
		stations or garages.	stations or garages.
		Small passable parts of buildings which can not easily be crossed by	Small passable parts of buildings which cannot easily be crossed by
		competitors, shall not be represented	competitors, shall not be represented
		on the map and shall be closed during	on the map and shall be closed during
		the competition.	the competition.
	Minimum area (isolated): 0.6 mm x 0.6	·	Minimum area: 0.25 mm <sup>2</sup>
	mm (footprint 9 m x 9 m).		(footprint 4 m <sup>2</sup> ).
	Minimum (inside) width: 0.3 mm		Minimum width: 0.5 mm.
	(footprint 4.5 m).		
	Colour: black 20%, black.	Colour: black 20%, black.	Colour: black (outline), black 20%.
	Outline width: 0.1mm	Outline width: 0.07mm	Outline width: 0.1mm

ISOM 2000	ISOM 2017-2 (Adjusted version	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January
	published January 2019)		2020, with errata)
No symbol	No symbol	526.3 Pillar	522.1 Pillar (P)
		A pillar is an upright shaft or structure	A pillar is an upright shaft or structure
		of stone, brick or other material,	of stone, brick or other material,
		relatively slender in proportion to its	relatively slender in proportion to its
		height and any shape in section, used as	height and any shape in section, used as
		a building support.	a building support.
		Pillars smaller than 2 m × 2 m are	Pillars smaller than $1 \text{ m} \times 1 \text{ m}$ are
		generally not represented.	generally not represented.
		Columns of pillars and pillars along	
		buildings are not represented.	
		However, if they are important for	
		navigation and orientation, they can be	
		represented.	
		Colour: black.	Colour: black.
		Minimum size: 0.5x0.5mm	Minimum size: 0.5x0.5mm
530 Ruin	523 Ruin (L)	No symbol	No symbol
The ground plan of a ruin is shown to	A ruined building. The ground plan of a		
scale, down to the minimum size shown	ruin is shown to scale, down to the		
opposite. Very small ruins may be	minimum size. Ruins that are so small		
drawn with a solid line.	that they cannot be drawn to scale may		
	be represented using a solid line.		
Min area: 0.8x0.8mm	Minimum area (outside measures): 0.8		
	mm x 0.8 mm (footprint 12 m x 12 m).		
Colour: black.	Colour: black.		
Line width: 0.16mm	Line width: 0.16mm		
	Dash length: 0.5mm		
Gap distance: 0.25mm	Gap distance: 0.25mm		

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
535 High tower	524 High tower (P)	535 High tower	524 High tower (P)
A high tower or large pylon, standing	A high tower or large pylon. If it is in a	A high tower or large pylon.	A high tower or large pylon.
above the level of the surrounding	forest, it must be visible above the level	A might tower or large pyron.	A trigit tower or large pyron.
forest.	of the surrounding forest.		
10.050	Towers with a larger footprint must be	Very large towers shall be represented	Very large towers shall be represented
	represented using symbol Building	in plan shape with the symbol building	in plan shape with the symbol <i>Building</i>
	(521).	(526.1).	(521).
Location is at the centre of gravity of the symbol.		(323.2).	(022)
,	The symbol is orientated to north.	The symbol is orientated to north.	The symbol is orientated to north.
[Symbol is a dot with a plus sign	[Symbol is a dot with a plus sign	[Symbol is a dot with a plus sign	[Symbol is a dot with a plus sign
superimposed over it.]	superimposed over it.]	superimposed over it.]	superimposed over it.]
	Footprint: 21 m in diameter.		Footprint: 8.4 m in diameter.
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Diameter of centre dot: 0.8mm	Diameter of centre dot: 0.8mm	Diameter of centre dot: 1.2mm	Diameter of centre dot: 1.2mm
Lines, width: 0.16mm	Lines, width: 0.16mm	Lines, width: 0.25mm	Lines, width: 0.25mm
Lines, length: 0.3mm	Lines, length: 0.3mm	Lines, length – end to end: 2.1mm	Lines, length – end to end: 2.1mm
536 Small tower	525 Small tower (P)	536 Small tower	525 Small tower (P)
An obvious shooting platform or seat,	An obvious small tower, platform or	An obvious small tower, platform or	An obvious small tower, platform or
or small tower.	seat.	seat.	seat.
Location is at the centre of gravity of	Location is at the centre of gravity of	The symbol is orientated to north.	The symbol is orientated to north.
the symbol.	the symbol.		
	The symbol is orientated to north.		
[Symbol is a T]	[Symbol is a T]	[Symbol is a T]	[Symbol is a T]
	Footprint: 15 m x 15 m.		Footprint: 6 m x 6 m.
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Line widths: 0.16mm	Line widths: 0.16mm	Line widths: 0.22mm	Line widths: 0.22mm
Length of horizontal line: 1.0mm	Length of horizontal line: 1.0mm (OM)	Length of horizontal line: 1.5mm	Length of horizontal line: 1.5mm
Length of vertical line: 1.0mm	Length of vertical line: 1.0mm (OM)	Length of vertical line: 1.5mm	Length of vertical line: 1.5mm

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
537 Cairn	526 Cairn (P)	537 Cairn, memorial, small monument	526 Cairn, memorial, small monument
		or boundary stone	or boundary stone (P)
Cairn, memorial stone or boundary	A prominent cairn, memorial stone,	Cairn, memorial, small monument or	Cairn, memorial, small monument or
stone (or a trigonometric point in some countries)	boundary stone or trigonometric point.	boundary stone	boundary stone <mark>that is obvious</mark> .
more than 0.5 m high.	Minimum height: 0.5 m.	more than 0.5 m high.	
		Large massive monuments shall be	Large massive monuments shall be
		represented in plan shape with the	represented in plan shape with the
		symbol building (526.1).	symbol Building (521).
[Symbol is a circle with a dot inside]	[Symbol is a circle with a dot inside]	[Symbol is a circle with a dot inside]	[Symbol is a circle with a dot inside]
	Footprint: 12 m in diameter.		Footprint: 4 m in diameter.
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Circle line width: 0.16mm	Circle line width: 0.16mm	Circle line width: 0.22mm	Circle line width: 0.22mm
Circle diameter: 0.8mm	Circle diameter: 0.8mm (OM)	Circle diameter: 0.98mm [OM]	Circle diameter: 1.0mm (OM)
Dot diameter: 0.14mm	Dot diameter: 0.14mm	Dot diameter: 0.2mm	Dot diameter: 0.2mm
538 Fodder rack	527 <mark>Fodder rack</mark> (P)	538 Fodder rack	527 Fodder rack (P)
A fodder rack which is free standing or	A fodder rack, which is free standing or	A fodder rack, which is free standing or	A fodder rack, which is free standing or
built on to a tree.	attached to a tree.	attached to a tree.	attached to a tree.
Location is at the centre of gravity of	Location is at the centre of gravity of		
the symbol.	the symbol.		
	The symbol is orientated to north.	The symbol is orientated to north.	The symbol is orientated to north.
For land access reasons these may be			
omitted.			
[Symbol is an upward pointing arrow]	[Symbol is an upward pointing arrow]	[Symbol is an upward pointing arrow]	[Symbol is an upward pointing arrow]
	Footprint: 13.5 m x 13.5 m.		Footprint: 6 m x 6 m.
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Line width: 0.16mm	Line width: 0.16mm	Line width: 0.22mm	Line width: 0.22mm
Height: 1.0mm	Height: 0.9mm (OM)	Height: 1.5mm (OM)	Height: 1.5mm (OM)
Horizontal distance across arrow:	Horizontal distance across arrow:	Horizontal distance across arrow:	Horizontal distance across arrow:
1.0mm	0.9mm (OM)	1.5mm (OM)	1.5mm (OM)
Arrow angle: 60 degrees	Arrow angle: 60 degrees	Arrow angle: 60 degrees	Arrow angle: 60 degrees
		Arrow blade length: 0.87mm	Arrow blade length: 0.87mm

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
533 Crossable pipeline	528 Prominent line feature (L)	533 Passable pipeline	528 Prominent line feature (L)
A pipeline (gas, water, oil, etc.) above	A prominent man-made line feature.	A pipeline (gas, water, oil, etc.) above	A prominent man-made line feature.
ground level which can be crossed over	For example, a low pipeline (gas, water,	ground level which can be crossed over	For example, a low pipeline (gas, water,
or under.	oil, heat, etc.) or a bobsleigh / skeleton	or under.	oil, heat, etc.) or a bobsleigh / skeleton
	track that is clearly visible.		track that is clearly visible.
	The definition of the symbol must be		The definition of the symbol must be
	given on the map.		given on the map.
[A line with a series of arrowheads	[A line with a series of arrowheads	[A line with a series of arrowheads	[A line with a series of arrowheads
along it]	along it]	along it]	along it]
	Minimum length: 1.5 mm (footprint		Minimum length: 2.2 mm
	22.5 m). Must include an arrowhead.		(footprint 8.8 m). Must include an
			arrowhead.
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Line width: 0.14mm	Line width: 0.14mm	Main line width: 0.21mm	Main line width: 0.21mm
		Arrowhead line width: 0.14mm	Arrowhead line width: 0.14mm
Distance between arrowheads: 2.5mm	Distance between arrowheads: 2.0mm	Distance between arrowheads: 3.75mm	Distance between arrowheads: 3.75mm
Length of arrowhead blade: 0.5mm	Length of arrowhead blade: 0.4mm	Length of arrowhead blade: 0.75mm	Length of arrowhead blade: 0.75mm
Angle of arrowhead blade: 45 degrees	Angle of arrowhead blade: 45 degrees	Angle of arrowhead blade: 45 degrees	Angle of arrowhead blade: 45 degrees

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
534 Uncrossable pipeline	529 Prominent impassable line feature	534 Impassable pipeline (forbidden to	529 Prominent impassable line feature
	(L)	cross)	(L)
A pipeline which cannot be crossed.	An impassable man-made line feature.	An impassable pipeline (gas, water, oil,	An impassable man-made line feature.
[A line with a series of double	For example, a high pipeline (gas, wa-	etc.) above ground level which shall not	For example, a high pipeline (gas, wa-
arrowheads along it]	ter, oil, heat, etc.) or a bobsleigh /	be crossed, due to forbidden access or	ter, oil, heat, etc.) or a bobsleigh /
	skeleton track.	because it may constitute a danger to	skeleton track.
		the competitor because of its height.	
	The definition of the symbol must be		The definition of the symbol must be
	given on the map.		given on the map. A prominent
			impassable line feature shall not be
			crossed.
		It is forbidden to cross an impassable	[OA Rule 17.2 says competitors shall
		pipeline. Competitors violating this rule	not cross a feature drawn with a
		will be disqualified.	Prominent impassable line feature
			symbol.]
	[A line with a series of double	[A line with a series of double	[A line with a series of double
	arrowheads along it]	arrowheads along it]	arrowheads along it]
	Minimum length: 2 mm		Minimum length: 3 mm (footprint 12
	(footprint 30 m). Must include a double		m). Must include a double arrowhead.
	arrowhead.		
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Main line width: 0.18mm	Main line width: 0.25mm	Main line width: 0.4mm	Main line width: 0.4mm
Arrowhead line width: 0.14mm	Arrowhead line width: 0.14mm	Arrowhead line width: 0.14mm	Arrowhead line width: 0.14mm
Distance between arrowheads – within	Distance between arrowheads – within	Distance between arrowheads – within	Distance between arrowheads – within
double: 0.6mm	double: 0.6mm (CC)	double: 0.9mm	double: 0.9mm
Distance between arrowheads –	Distance between arrowheads –	Distance between arrowheads –	Distance between arrowheads –
between doubles, closest arrowheads	between doubles, right arrowheads	between doubles, right arrowheads	between doubles, right arrowheads
2.5mm	2.0mm (CC)	3.75mm	3.75mm
Length of arrowhead blades: 0.5mm	Length of arrowhead blades: 0.4mm	Length of arrowhead blades: 0.75mm	Length of arrowhead blades: 0.75mm
Angle of arrowhead blade: 45 degrees	Angle of arrowhead blade: 45 degrees	Angle of arrowhead blade: 45 degrees	Angle of arrowhead blade: 45 degrees

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
539 Special man-made features [ring]	530 Prominent man-made feature -	539 Prominent man-made feature	530 Prominent man-made feature –
	ring (P)	[ring]	ring (P)
Special man-made features are shown		A man-made feature which is significant	A man-made feature which is significant
with these symbols.		or prominent.	or prominent.
	Location is at the centre of gravity of the symbol.		
The definition of the symbols must be	The definition of the symbol must be	The definition of the symbol shall	The definition of the symbol must be
given in each case in the map legend.	given on the map.	always be given in the map legend.	given on the map.
	Footprint: 12 m in diameter.		Footprint: 4 m in diameter.
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Line width: 0.16mm	Line width: 0.16mm	Line width: 0.22mm	Line width: 0.22mm
Circle diameter: 0.8mm	Circle diameter: 0.8mm (OM)	Circle diameter: 0.98mm	Circle diameter: 1.0mm
540 Special man-made features	531 Prominent man-made feature - x	540 Prominent man-made feature	531 Prominent man-made feature – x
	(P)		(P)
Special man-made features are shown		A man-made feature which is significant	A man-made feature which is significant
with these symbols.		or prominent.	or prominent.
	Location is at the centre of gravity of		Location is at the centre of gravity of
	the symbol.		the symbol,
	The symbol is orientated to north.		
The definition of the symbols must be	The definition of the symbol must be	The symbol is orientated to north.	and the symbol is orientated to north.
given in each case in the map legend.	given on the map.	The definition of the symbol shall	The definition of the symbol must be
		always be given in the map legend.	given on the map.
	Footprint: 12 m x 12 m.		Footprint: 4.8 m x 4.8 m.
Colour: black.	Colour: black.	Colour: black.	Colour: black.
Line width: 0.16mm	Line width: 0.16mm	Line width: 0.22mm	Line width: 0.22mm
X height: 0.8mm	X height and horizontal width: 0.8mm	X height: 1.2mm	X height and horizontal width: 1.2mm
	(OM)		
531 Firing range	Discontinued	No symbol	No symbol
A firing range is shown with a special			
symbol to indicate the need for caution.			
Associated buildings are individually			
marked.			
Colour: black.			

ISOM 2000	ISOM 2017-2 (Adjusted version published January 2019)	ISSOM 1 January 2007	ISSprOM 2019 (valid from 1 January 2020, with errata)
No symbol	A distinct stairway through the terrain which helps to climb very steep slopes or to cross over impassable objects. A stairway going through rock passages or between impassable objects may be drawn without border lines. An easily runnable stairway or indistinct stairway should be drawn as a footpath. Steps of a stairway shall be represented in a generalized manner.  Minimum length: 3 (graphical) steps.  Minimum width: 0.4 mm (IM). Colour: black. Line stair & outside width: 0.1mm Gap between stair lines: min 0.4mm (IM)	Steps of a stairway shall be represented in a generalized manner. The thickness of step lines shall always be 0.07 mm.  Colour: black. Line, stair, width: 0.07mm Gap between stair lines: min 0.4mm [CC]	Steps of a stairway shall be represented in a generalized manner.  Minimum length: 3 (graphical) steps. We assume this means three step lines. Minimum width: 0.4 mm (IM). Colour: black. Line, stair, width: 0.1mm Gap between stair lines: min 0.4mm (IM)
532 Grave A distinct grave marked by a stone or shrine. Location is at the centre of gravity of the symbol, which is orientated to north. A cemetery is shown by using grave symbols as space permits.  Colour: black.	Discontinued	No symbol.	No symbol.