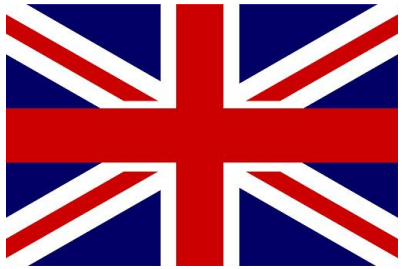


Indoor map standard

Edition: 2023-09-19

Introduction

With this map standard we are trying to make it easier for organizers and map makers and raise the quality for the runners. The standard should be able to represent a variety of buildings and course elements.

This map standard is only a guidance and resource - not a rulebook. Indoor orienteering is a young branch of orienteering and is still very much in development and we want to promote the development with this map standard!

Scale

The scale of an indoor map varies, but it’s not very relevant to participants.

The scale should be as large as possible, to increase the readability. The recommendation is to try to "fill out the paper" and therefore use as large a scale as possible.

The layout of the map maybe need adjustment to provide as large a scale as possible.

When the scale is taken into account, recommendations for minimum dimensions should also be taken into account, see upcoming sections.

Printing

The print is as important for Indoor orienteering as regular forest orienteering, to create fair conditions for runners.

Minimum dimensions and colors doesn’t matter if the printing is of poor quality.

Printing of Indoor maps should be made by certified printers for orienteering maps, this may vary from country to country, contact your national federation for advice.

Colors

The colors need to be in the right order in the map file. In the ocad/oom-files with the indoor symbols the colors are in the right order, there for its good to start from those files.

All printers have different settings for color and therefore we don’t have universal color settings, the need to be adjust for each printer. You can use the ISSprOM when doing the color settings since multiple colors are the same as the sprint map standard.

Minimum dimensions

Indoor orienteering maps have different scales, and there’s not any minimum dimensions for each symbol, but there is a recommendation for the readability.

The minimum dimension are measured in millimeters on a printed map, map makers need to print the map to make sure the minimum dimensions are correct.

Minimum dimension for important doorways is a minimum of 1,33 mm

Minimum dimension for important passages (stairs/hallway) is a minimum of 2,0 mm

Minimum with for stair letters are 2,0 mm.

Symbols

On the following pages the symbols of indoor maps are presented.

- Big furniture and inventory are drawn on the map
- Smaller inventory and easily movable objects like chairs, clothe hangers and cabinets on wheels.
- Local symbols should be published in the bulletins.

Floor

All runnable areas (except stairs and outdoor passages) is drawn with beige.

Walls

Walls can be generalised to the same thickness. In the case of very thick walls you can draw two walls with gray inbetween.

Exterior walls can be drawn 30% thicker to mark the outer limit of the building.

Fence

Uncrossable fence, for example a balcony.

Stair letters

Optional font, drawn with the same purple as barriers.

The letters should be places close to the stair and be very readable, in order not to be confused with other stairs.

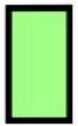
Recommended minimum width are 2 mm

Table

Tables are drawn after their shape.

If multiple tables are in a line they can be drawn as the same object.

Tables are up to 1 m high, after that it will be a shelf/cabinet. Standing tables are an exception.



Shelf/cabinet

Shelves and cabinets are drawn after their shape.

Shelves and cabinets are over 1 m high, if shorter it's a table.

Seating furniture

Seating furniture are drawn after their shape.

Only larger sofas and armchairs are drawn. Chairs and stools are not drawn.

Non-organised goods

Objects that cannot be categorised in other symbols, moving boxes, musical instruments and other surfaces that are not walkable.

Not to be confused with prohibited areas (violet grid) as used for the arena or other restricted areas.

Stair/steps

One step in the terrain = on step on the map, if it's possible.

The area between steps should be as wide as the step.

If the stair have more than four steps, a stair-arrow is drawn.

Large step

A large step that is still passable, for example the edge of a stage.

Ramp

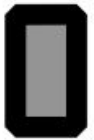
A ramp with a significant height difference is drawn on the map.

A dashed line is drawn in the beginning and end of the ramp.

Closed rooms/infill

Rooms that are not used are drawn with grey color. If there are large gray areas they can be removed from the map.

Note that "vacuum/void" is drawn in white (for example courtyards that are not used).



Plant

Large plants that are placed on the floor and could be used for map reading or for a control placement.

Toilet

Toilet or urinal. The V is in the direction of the toilets rounded part.

Sink

Sink or drinking water fountain.

Shower

Special/local object

Other objects, statues, gym equipment, last control.

Blue cross is primarily related to water.

If a special object could be mistaken,
it should be published in the bulletins.

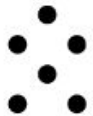
Stove

The direction of the V is the same as the buttons/oven.

Reduced runnability

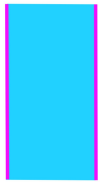
Areas where the floor is uneven and/or low ceiling.

Reduced runnability is drawn on top of the floor color.



Outdoor passage

Outdoor passages are marked with purple color along the edges.



Barriers/forbidden passage

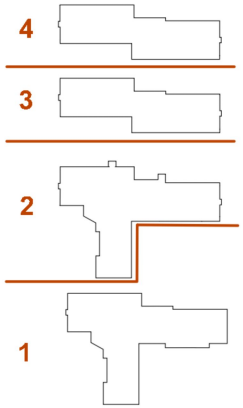
- Barriers are drawn with purple color, same as the course symbols.
- The thickness of the barriers chould be 3x wider than course lines.
- Very important to cut the control point circles and course lines so that barriers are obvious for the runners and not confused with the course.
- If there are forbidden passages in stairs or along with hallways that are too narrow the stair/hallway should be widened first. If it’s still too narrow the barriers can be made narrower.

Course planning symbols

- Control points, course lines and other course symbols should have the same dimensions as the ISSprOM.
- Courses need to be planned careful to be readable for the runners. It the course crosses itself too many times it can be hard for runners to distinguish the course.
- Very important to cut the control point circles and course lines so that it’s easily understandable for runners.
- The course and route choices should be the challenge, not the layout of the course!

Floor numbers and dividers

- The floors on an indoor orienteerin map needs to be easy to distinguish from eachother:
  - A thick separator between the floors.
  - A large floor number
- The map layout could be be published in the bulletins to prepare the runners (see below)

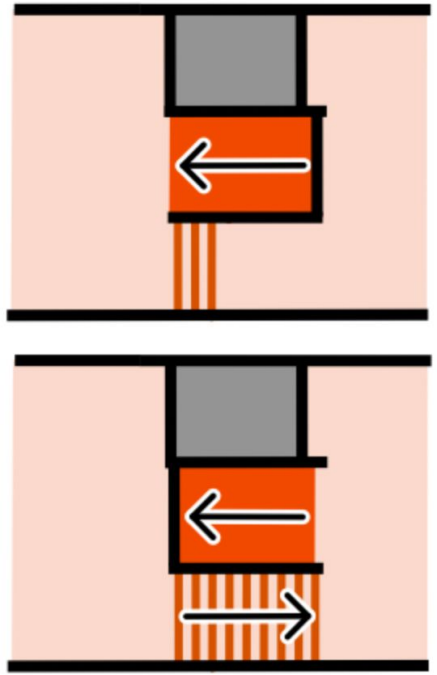


Stairs and floor change

- A red/orange color in stairs with floor change.
- Steps in stairs without floor change. Stairs with more than 4 steps is drawn with arrow.

- The stair arrow is always drawn upwards.
- The arrow is drawn along the entire stair and has a white edge.
- Important with a clear “entrance” to stairs and that it’s only possible to enter the stair from one direction.

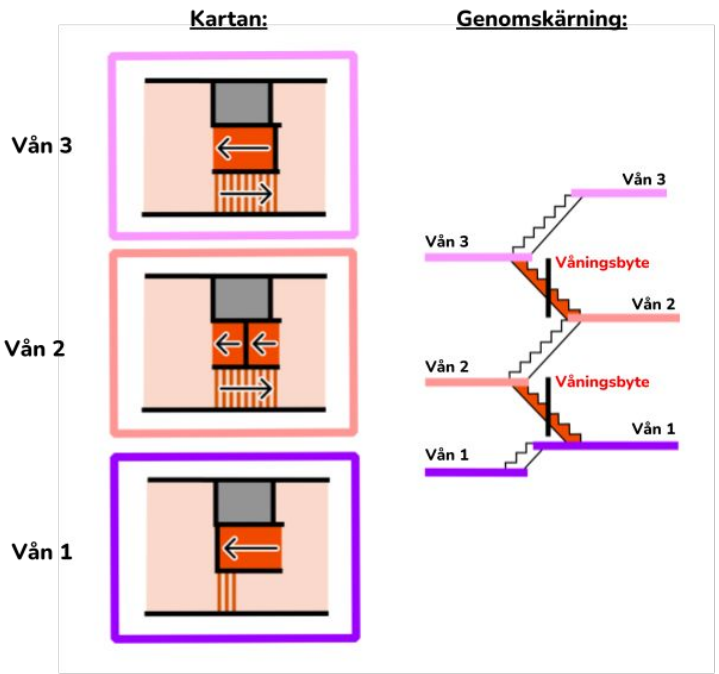
- Spiral staircases are drawn without arrow. Large spiral staircases could have an arrow if a wall symbol for the floor change is added.



Example stairs

Stairs are a crucial part of an indoor map, therefore it’s important that they are drawn in a logical and consistent way.

A initial concept for the stairs needs to be made when drawing a map, where you decide which parts belong to which floor. See example to the right.



One-way passage

In a one-way passage the runners can only run in the same directions as the arrows.

One-way passages are drawn with V-arrows across the entire width of the passage. One-way passages are drawn in the same color as stairs.

In the ocad/oom-files you can find a line symbol that makes it easy to draw one-way passages.

One-way passages are marked in the terrain with yellow or black/yellow tape and stop-signs if you run from the wrong direction.

New organizer or map maker?

In order for an indoor orienteering map to be as accurate as possible, a base is required. A detailed drawing or map of the building with at least walls and doorways is good. If there are no drawings or blueprints of the building, maybe there is another type of map of the building?

If you don’t have a good base, the outer walls can be drawn based on a satellite image or map of the city, maybe from the municipality?

Process of drawing a map

1. Create a base and use the blueprint as background picture in ocad/oom. Scale the background pictures so that the scale fits the map symbols.

2. Draw your base with walls and other things from the blueprint. The work on site will go faster if you draw as much as you can at home.

3. Mapping on site in the building, focus on furniture. Double-check that the walls and doorways are correct.

4. When all work is done, add floor color and stair letters.

5. Try printing the map to decide what scale is suitable. Make the layout with logos and text.