

AnyRail 7 manual

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1 Getting Started

We've designed AnyRail™ to be as straightforward as possible. You can start experimenting with layouts as soon as you've installed the software. However, it's probably a good idea to read through this Getting Started guide.

1.1 Setting up

The **Settings** tab enables you to set up AnyRail to suit your way of working. Most of the default settings should be OK for now. However, you probably want to choose a measurement system and specify a work area right away.

1.1.1 Choosing a measurement system

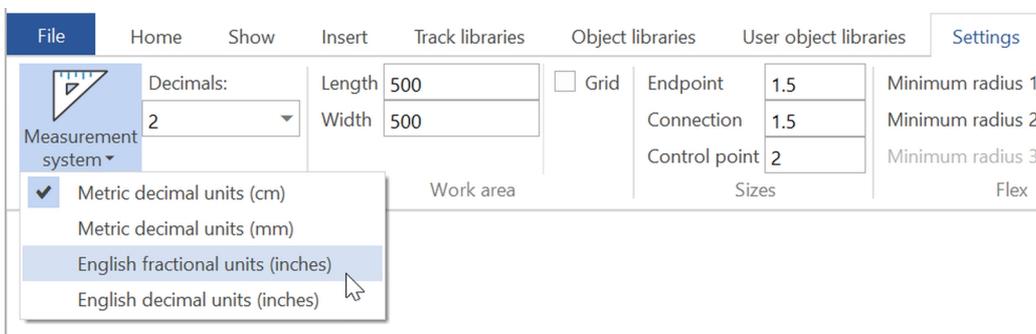
By default, all measurements are metric. However, you can change this.

To specify a measurement system

1. Click the **Settings** tab:



2. Click **Measurement system**:



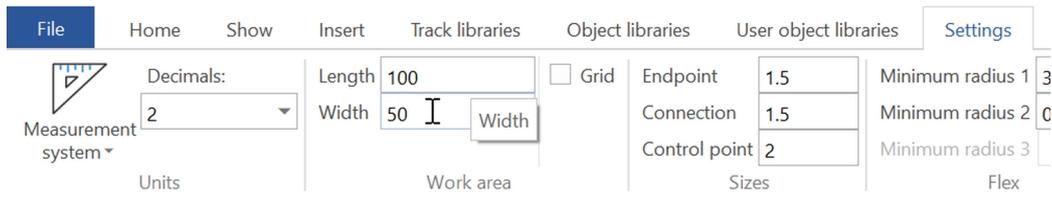
If you select **English fractional units**, AnyRail shows all measurements using fractions, e.g. 20 ³/₄. If you select **English decimal units**, the same value appears as 20.75. AnyRail accepts measurements in both formats.

1.1.2 Specifying a work area size

In AnyRail, you can set the outer limits of your work area.

To specify a work area size

1. Click the **Settings** tab.
2. Find the **Work Area** group:



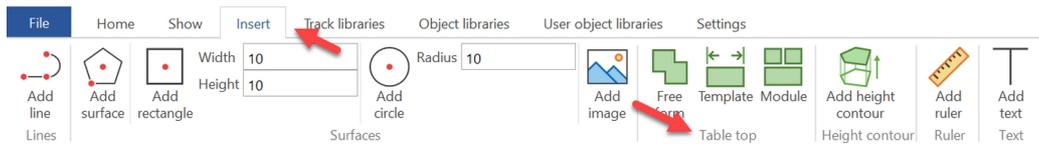
3. Enter a **Length** and **Width**.

1.1.3 Creating a table top

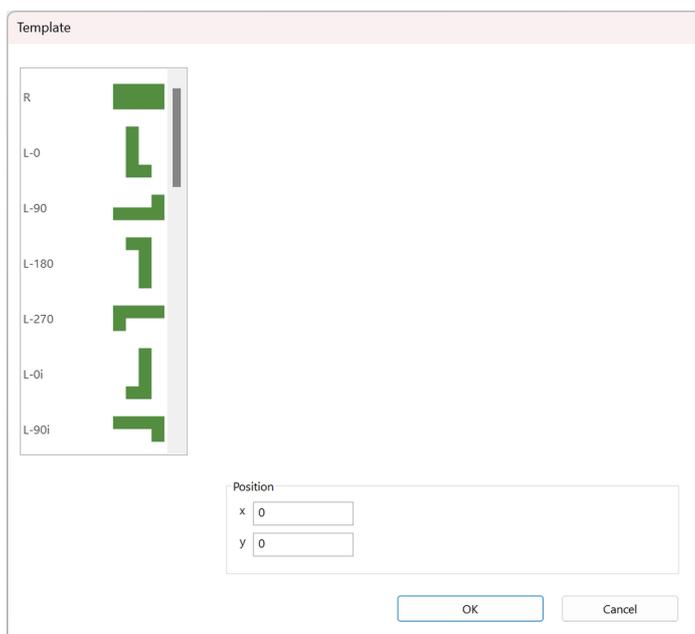
For indoor layouts, you'll probably want to draw a train table.

To add a table top

1. Open the **Insert** tab and find the **Table top** group:

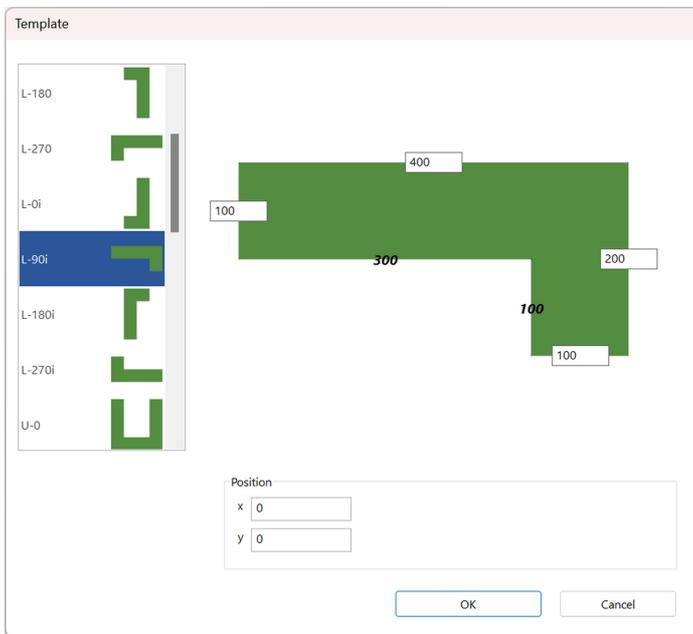


2. Click **Template**:

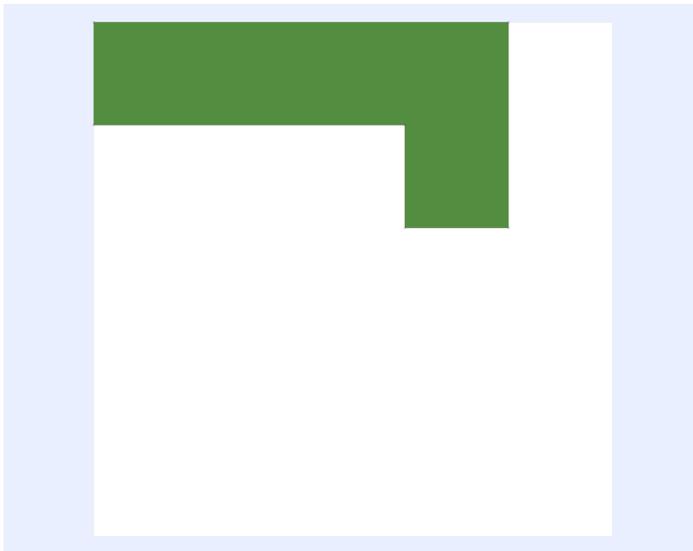


3. Select a template, change the values to match the desired dimensions, and click **OK**.

TIP: Use the **Position** coordinates to put the left top corner of the table top in a certain location.



The table top appears on the work area.



NOTE: Make sure the work area is large enough to contain the table top.

TIP: If none of the templates fits your needs, you can use the **Free form** function.

1.1.4 View drawing scale

This is roughly the scale at which things are displayed on screen. This is not to be confused with your modeling scale.

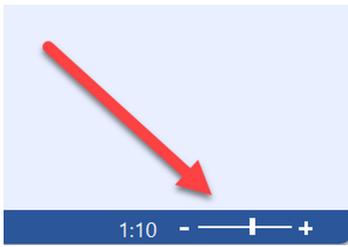
Don't rely on this for precise measurements, as the actual sizes depend on the size of your monitor.

To zoom in or zoom out

For fast zoom, press CTRL and use the mouse wheel.

Or:

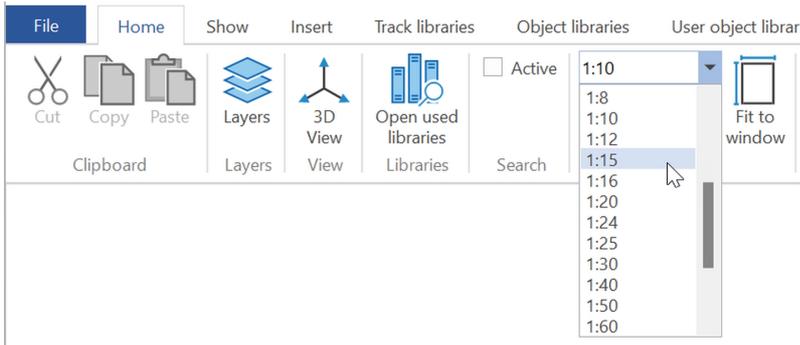
1. Locate the View Scale slider in the lower right corner:



2. Move the slider to change the view scale.

Or:

1. Click the **Home** tab.



2. Select a View Scale.

When you set the view scale to 1:10, one centimeter in the plan represents 10 about centimeters in reality. However, this does not take into account your real screen size.

TIP: To quickly zoom, press *CTRL* and use the mouse wheel.

TIP: To zoom using the keyboard, press *CTRL +* or *CTRL -*.

NOTE: This setting has nothing to do with the train scale i.e.: TT, O, HO, etc. The train scale depends on which track library you use.

1.2 Track Libraries

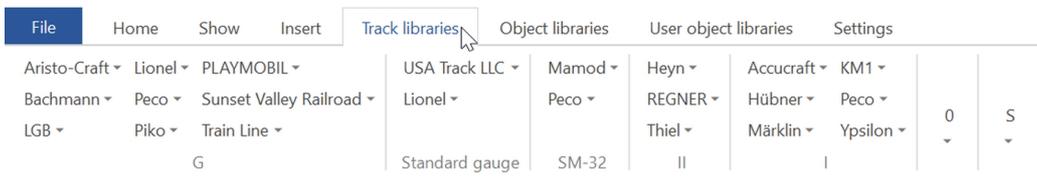
The first thing you need is some track!

AnyRail keeps track in libraries, and has one for all the well-known manufacturers, including Atlas, Märklin, Lionel, Roco, Peco, and many others. Each piece of track matches the original as closely as possible - some of them were even created using the manufacturer's original CAD files.

1.2.1 Opening a track library

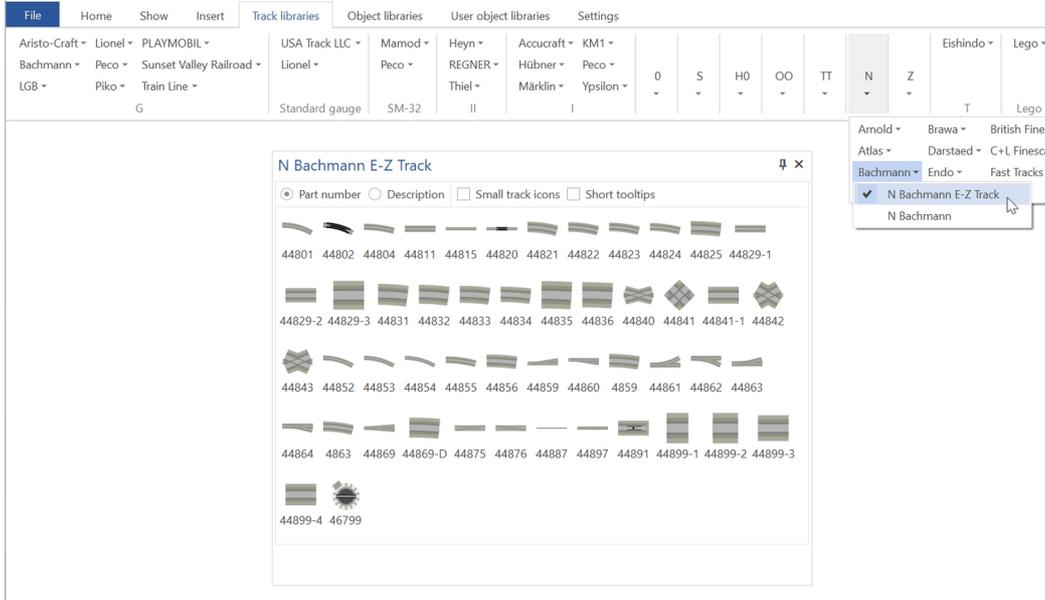
To open a Track Library

1. Click the **Track libraries** tab:



You'll see a group for each scale.

2. Click the name of the manufacturer to open the list of track libraries.
3. Select a track library:



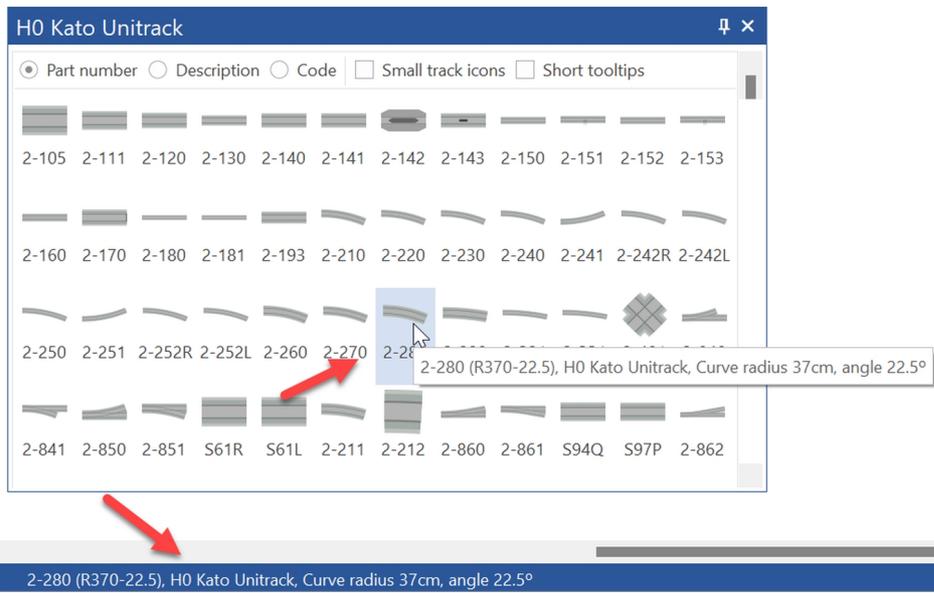
You can have as many libraries open as you want. Don't worry, AnyRail won't link incompatible track pieces – unless you tell it to (see The AnyRail Settings Tab).

TIP: To open all the libraries used in a plan at once, click **Open used libraries** on the Home tab.

1.2.2 Browsing a track library

To browse a track library

The status bar at the bottom of the screen shows detailed information about the track.

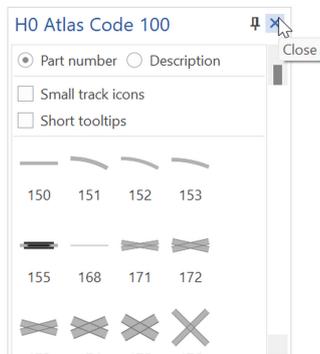


1. Hover the mouse over the track to see the tooltip.
2. You'll see the full information in the status bar.

1.2.3 Closing a track library

To close a Track Library

- Click the little cross in the right upper corner of the track window:



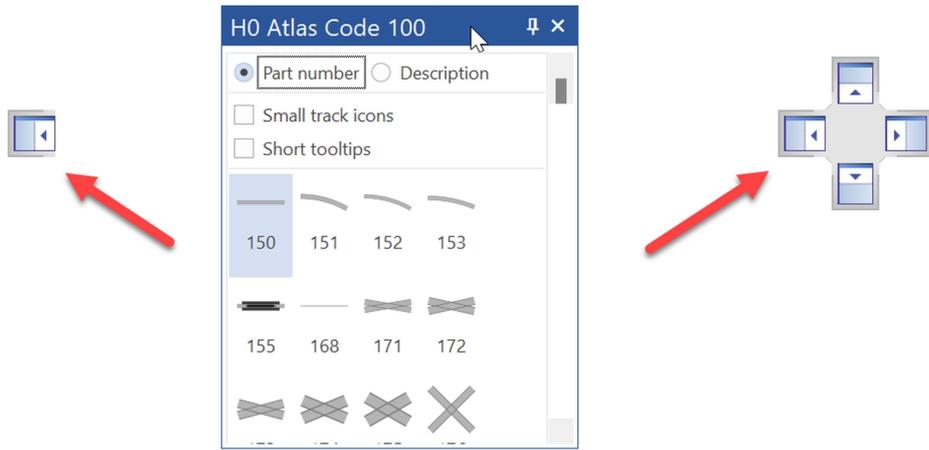
NOTE: You can also close a library the same way you opened it.

1.3 Docking and undocking a library window

Drag the Library window around like any other window. You can also *dock* it. This means that it will stop floating and stick to the edge of the main window.

To dock a Library window

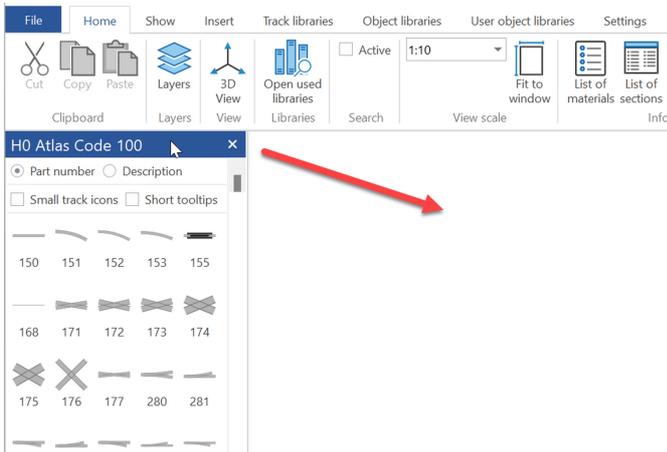
- Drag the library onto one of the docking stickers:



TIP: To avoid docking, hold down *CTRL* while you move the library.

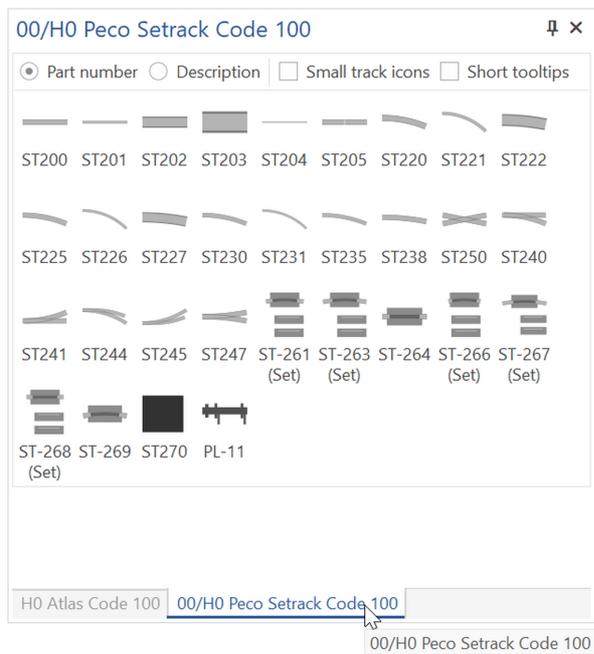
To undock a Library window

- Drag the library by the title bar to undock:



Nesting libraries

- Nest a library by dropping it onto the title bar of another library. Use the tabs to switch libraries:



TIP: To un-nest a library, drag it away by its tab.

1.4 Working with track

AnyRail is designed to make working with track quick and easy.

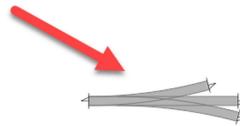
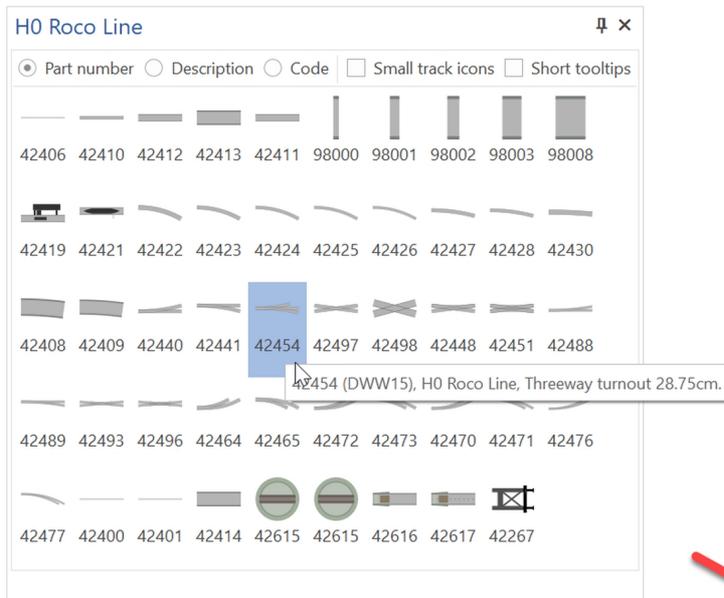
1.4.1 Adding track

To add a track Piece

There are three methods for adding new track:

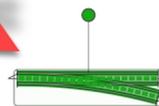
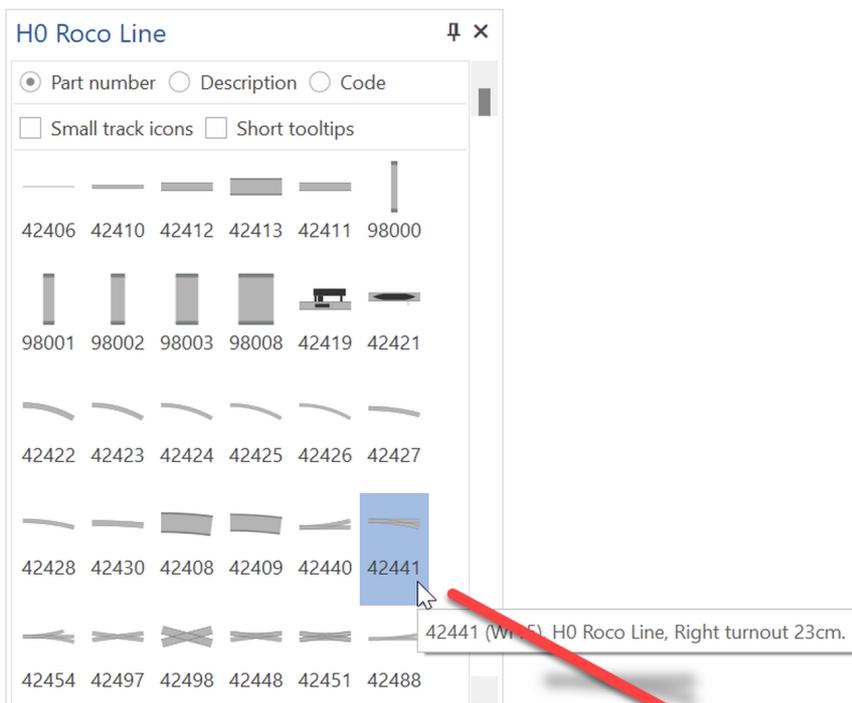
Method 1: Click

- Click the track and the piece appears on the work area:



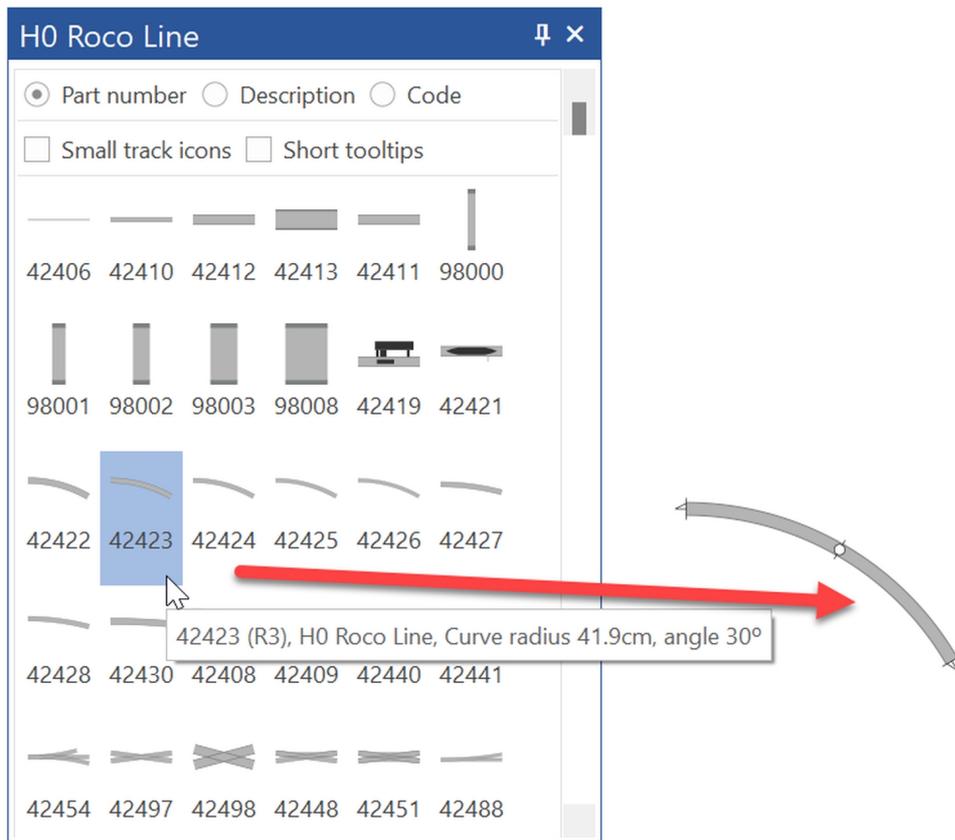
Method 2: Drag and drop

- Drag the piece from the library onto the work area:



Method 3: *SHIFT*-click to connect to the most recently added component

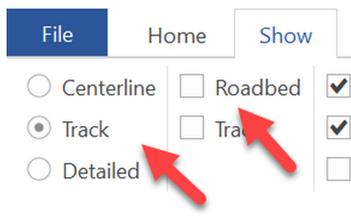
- Click piece while holding down the *SHIFT* key, and the new part automatically connects to the most recently added part:



TIP: To undo the most recent action, click the **Undo** button, or press *Ctrl-Z*.

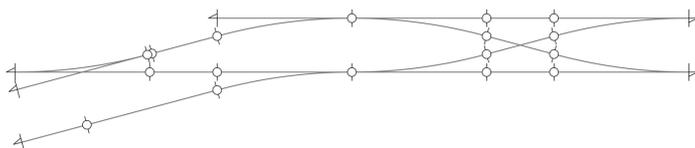
1.4.2 Track appearance

A few general settings control how track appears on your screen. You can find these in the ribbon **Show** tab:



- Select between the different styles.

Example 1: Centerline



Example 2: Track

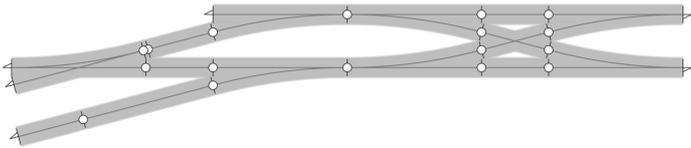


Example 3: Detailed



NOTE: AnyRail displays sleepers for aesthetic reasons, only. The position shown is not intended to be exact, though the width is correct.

Example 4: Centerline with roadbed

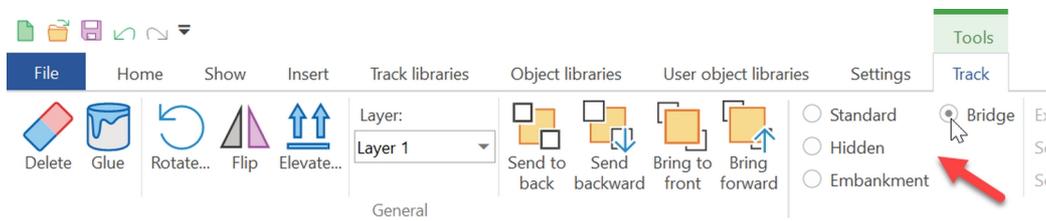


NOTE: To avoid disappointment, use this option to check that the roadbed fits on your train table and that the tracks are not too close to each other. Of course you also have to take into account the width of the trains and the necessary extra clearance in curves.

1.4.3 Track build style

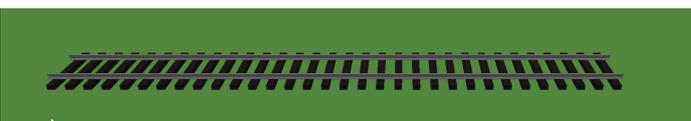
Track can have different build styles. This influences the drawing in 2D, but also in 3D.

Select the track first, so the **Track** tab appears.



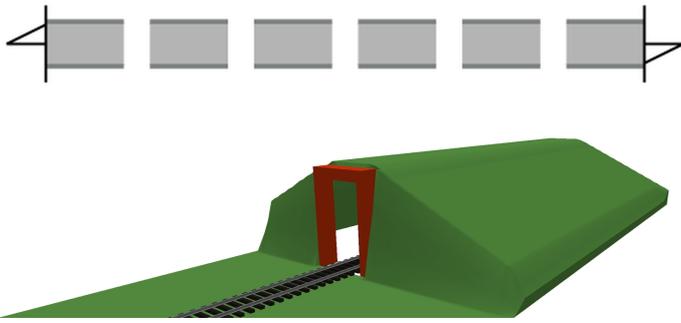
Standard

The track is displayed as-is, both in 2D and 3D.



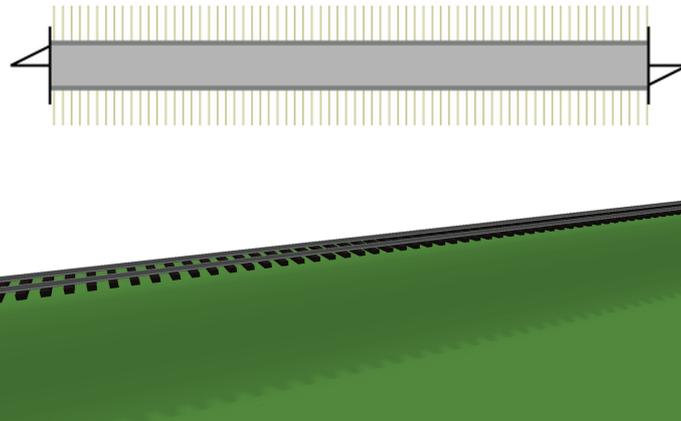
Hidden

The track is displayed as a dotted line in 2D. In 3D, it will be hidden, and a tunnel is created if necessary.



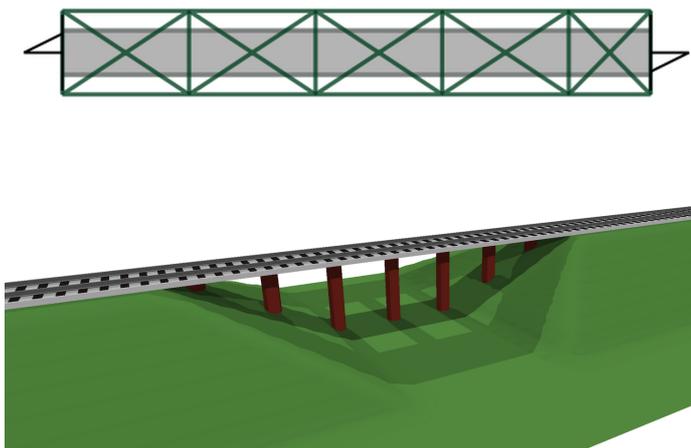
Embankment

In 2D, small lines indicate that the track is on an embankment. In 3D, the ground is shaped as an embankment.



Bridge

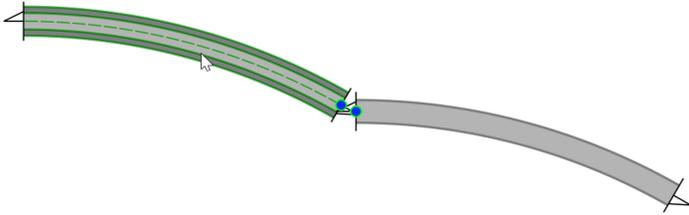
In 2D, trellis is drawn over the bridge. In 3D, the track is put on pillars.



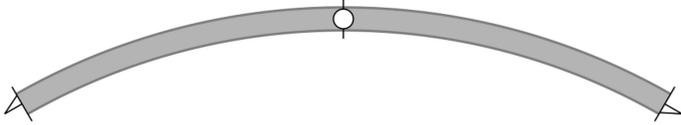
1.4.4 Moving and connecting track

Use the mouse to move and connect your track pieces. By default, only track from the same track system can be connected. However, you can override this (see The AnyRail **Settings** Tab).

To connect track



1. Drag the track close to the target. Blue dots appear to indicate the endpoints that will connect.



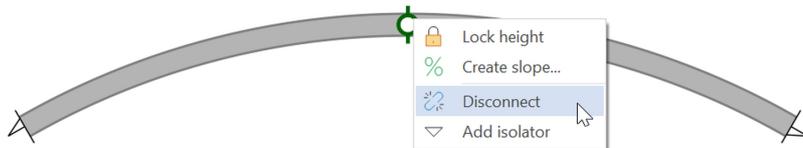
2. Release the mouse button. A circle marks the connection point.

AnyRail will shift and rotate the track to create a perfect connection.

1.4.5 Disconnecting track

You can disconnect track using the popup menu or the ribbon.

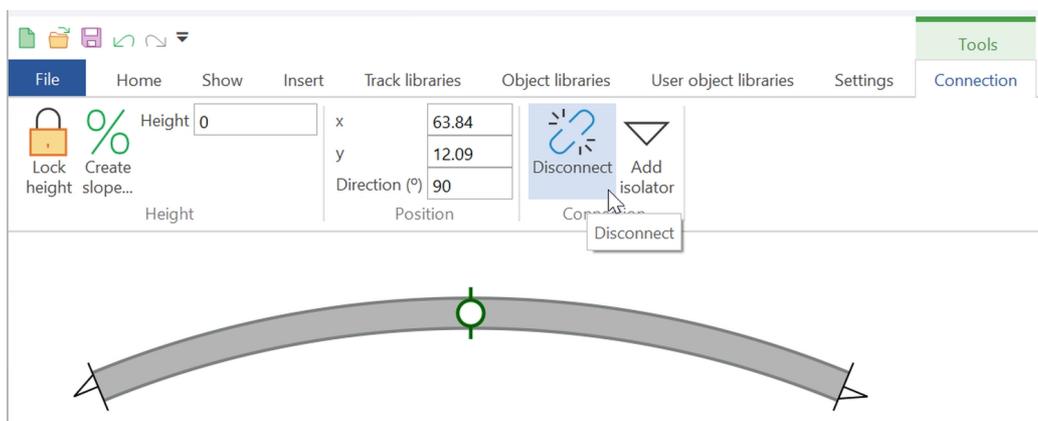
To disconnect an endpoint using the popup menu



- Right-click the connection and select **Disconnect**.

The track does not move, but the connection disappears.

To disconnect an endpoint using the ribbon



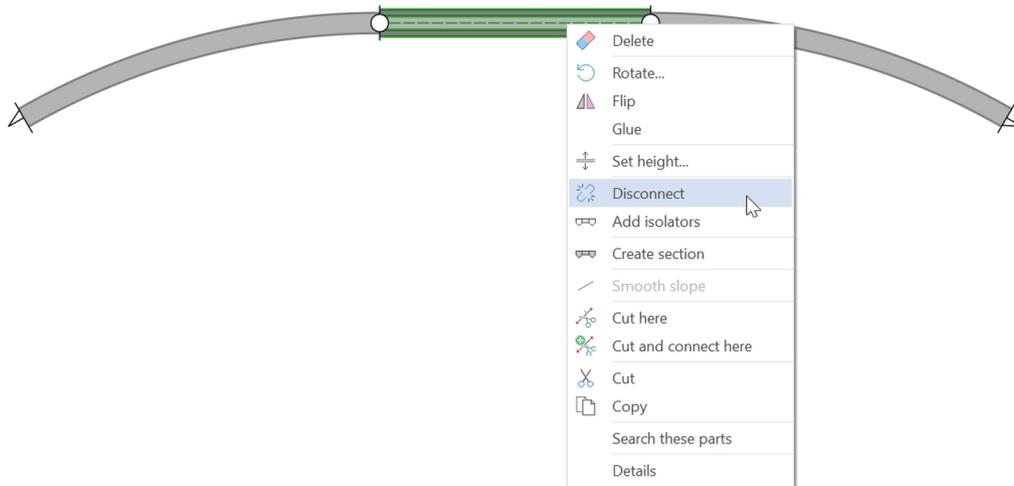
1. Click the connection to select it.

The **Connection** tab opens automatically.

2. Click **Disconnect** on the **Connection** tab.

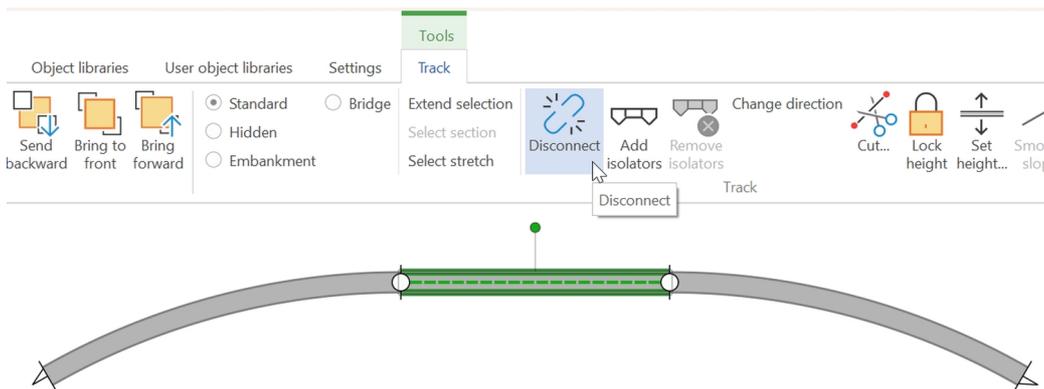
TIP: You can also press *DEL* on the keyboard to remove a selected connection.

To disconnect the track using the popup menu



- Right-click the track and select **Disconnect**.

To disconnect the track using the ribbon



1. Click the track to select it.

The **Track** tab appears automatically.

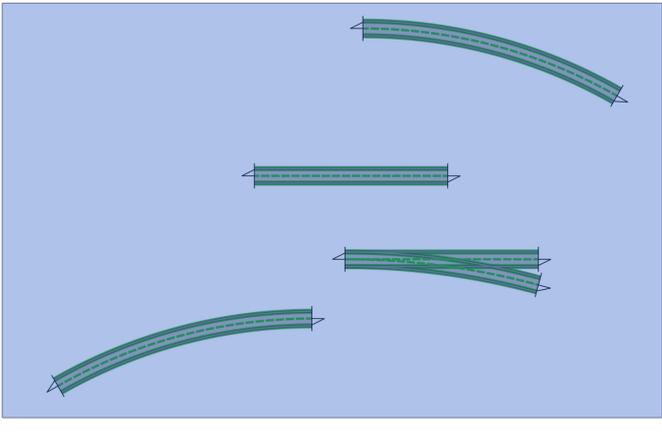
2. Click **Disconnect**.

1.4.6 Selecting track

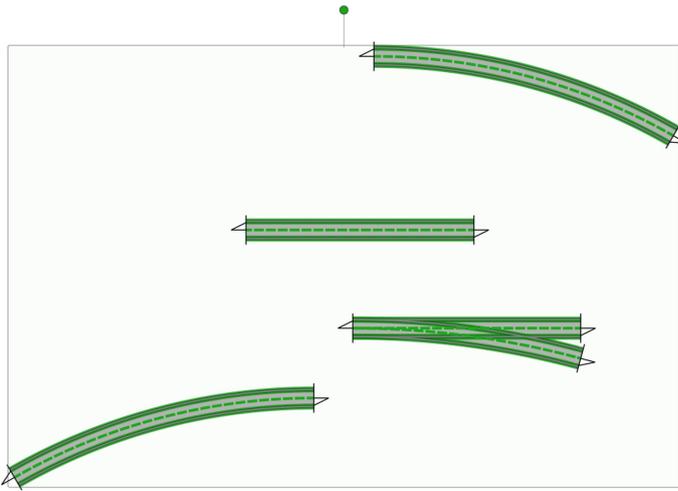
Obviously, you can select one section of track by simply clicking it.

However, you can also use the mouse to select several pieces of track, and then move or alter them as one.

To select track

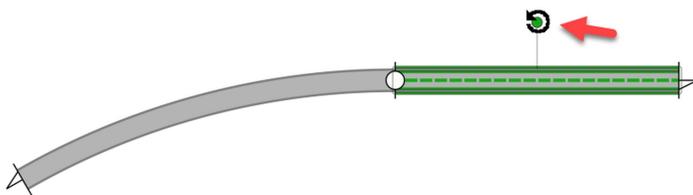


- Hold down the left mouse button and draw a box to select multiple pieces.

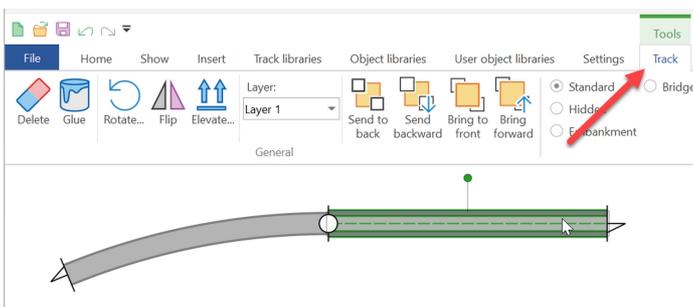


Selected track is highlighted in bold green.

- Drag one to drag them all.



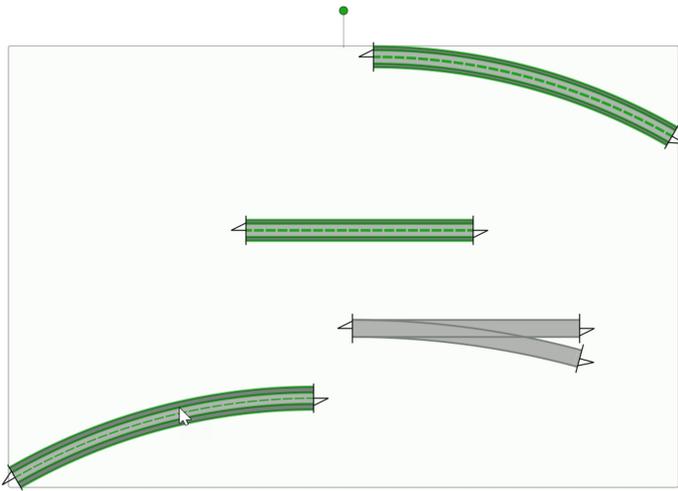
- Use the handle to rotate the selection.



Depending on what you've selected, extra tabs appear on the ribbon.

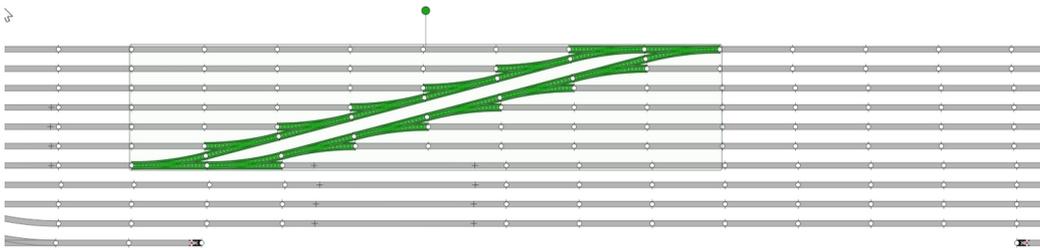
Other ways to select or deselect pieces

CTRL + click each piece



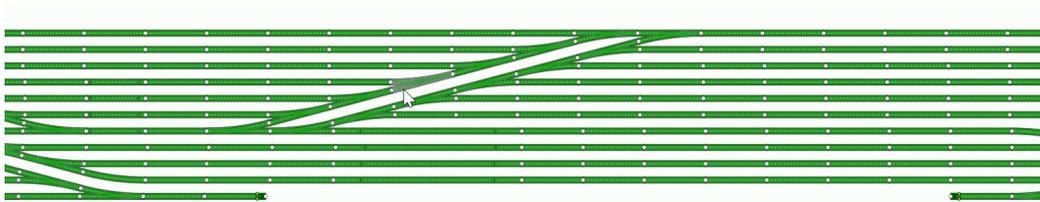
- *CTRL*-click to add or remove a part to the selection.

Double-click a piece to extend the selection



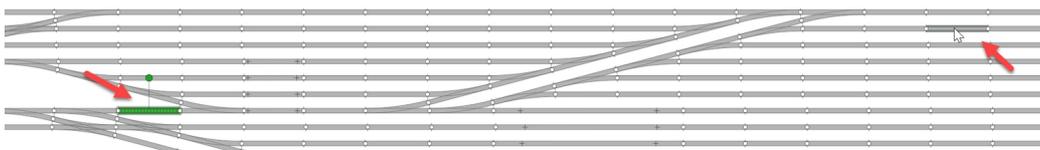
- Double click to extend the selection in a logical manner.

Triple-click to select all connected track



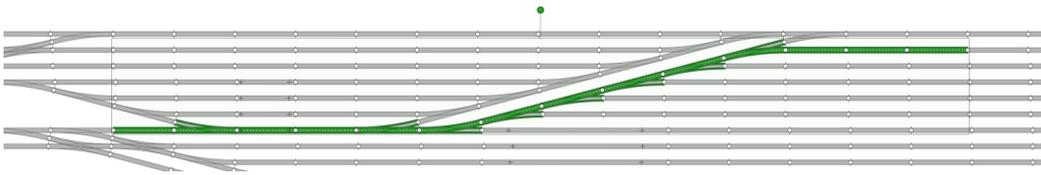
SHIFT-click to extend the selection

Before:



- *SHIFT*-click to select the route from an already selected part to here.

After:



The shortest route is selected.

To deselect a single piece

- *CTRL*-click the piece.

To deselect all the pieces

- Press *ESC*.

NOTE: You can also copy, paste and delete track in the standard Windows way.

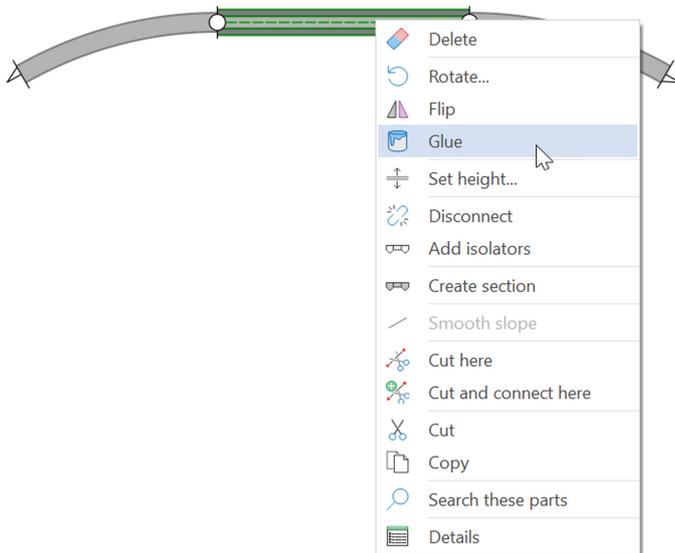
TIP: If you open AnyRail twice, you can copy and paste elements from one layout to the other.

1.4.7 Gluing track

If you want to make sure that you don't accidentally move track, you can glue it down!

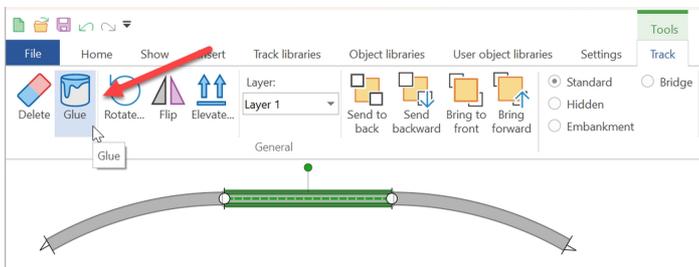
To glue track

Method 1:



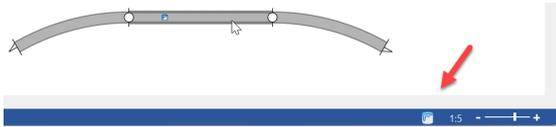
- Right-click the track and select **Glue**.

Method 2:



- Click the track to select it, then click **Glue** on the ribbon.

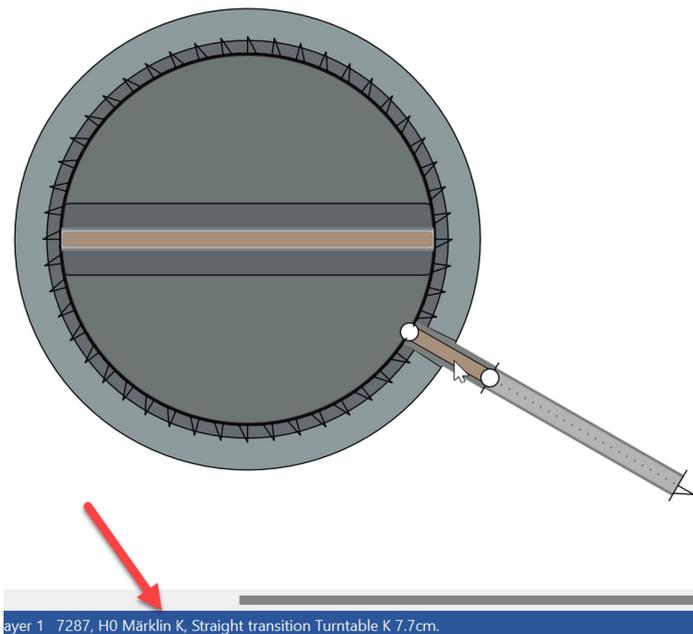
If you want to know whether track is glued, hover over it, and look in the status bar:



The status bar shows a glue pot whenever you hover over glued track.

1.4.8 Turntables

Many turntables require a special adapter or transition track from the same library in order to connect them to the regular tracks at the required angles.



Adapter track is used. Full information on a track element is always on the status bar when you hover it.

1.4.9 Closing gaps

If you use sectional track, you'll often find that it's difficult to make a perfect fit when your design becomes more complex.

Some manufacturers provide all sorts of filler track just for this purpose.

Sometimes you can make the track fit by using the play (wiggle room) in the track. While this can be considered cheating, sometimes you don't even notice that you're doing just that when laying real track.

In AnyRail, you can cheat a little bit as well.

In general, to close a small gap, you can often disconnect a stretch of track and rotate it one or two degrees to make your plan fit.

To close a gap

1. Switch off **Autoconnect** in the **Settings** tab. When you do that, track will no longer jump into position, but will be left just where you dropped it. If there is another piece of track within the **Distance** (defined in the **Settings** tab, under **Autoconnect**) a connection will be made to it.
2. Disconnect a stretch of track and rotate it one or two degrees so it will fit.
3. Put the track back in place and make sure to connect the outer ends.
4. Turn **Autoconnect** back on.

NOTE: Only resort to this technique after you've tried to make your track plan fit properly.

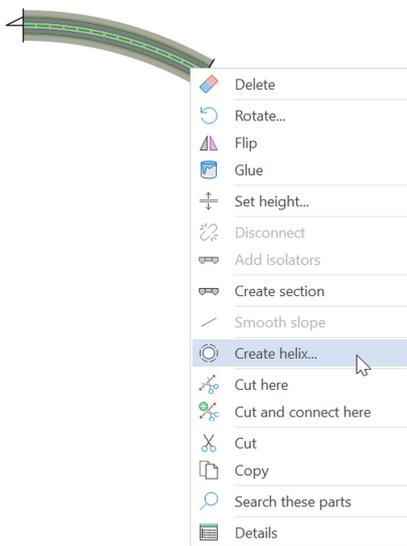
1.4.10 Creating a helix

A Helix is a corkscrew made from track, with the purpose of bringing trains to another level of your layout.

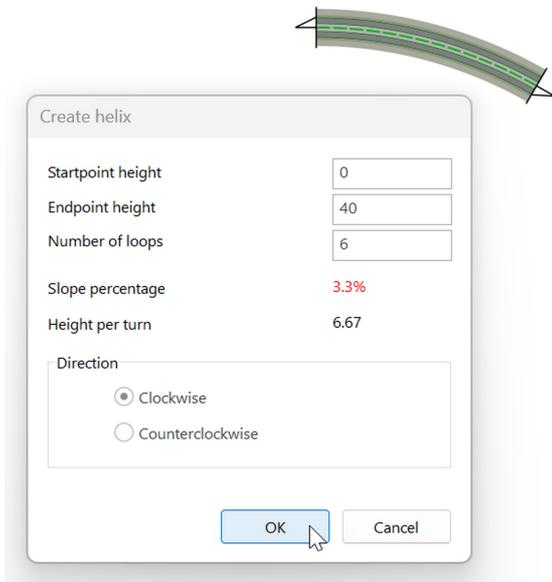
In AnyRail, they're easy to generate from a single curve.

To create a helix

1. Right-click a single, unconnected curve of your choice. This can be a piece of flex, after you've used the curve flex function.



2. Select **Create helix...**

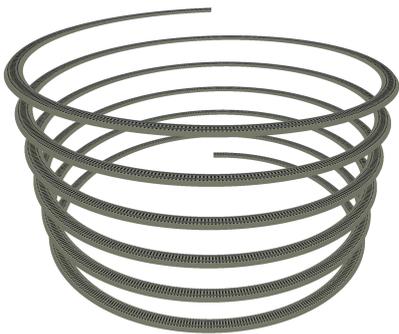


3. Enter the required values.

AnyRail displays the slope and the height clearance for the values entered.

4. Click OK.

5. To get an impression of the result, use the **3D view** from the **Home** tab:

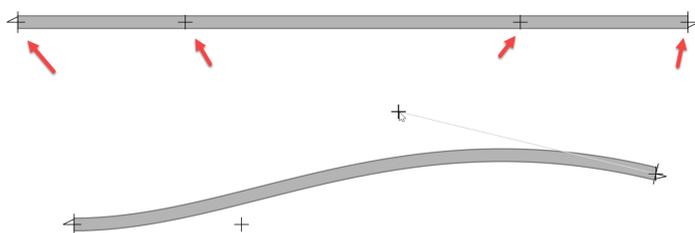


1.5 Flex track

Many sectional track manufacturers also provide *flex track*. Flex track can be used to fill gaps. Its looser curves also give your layout a more natural look.

1.5.1 Basic Handling

Some libraries contain *flex track*, designed to be bent, stretched and trimmed. You can do this to AnyRail flex track by using the control points. These are the little crosses that appear at either end of a piece, and on either side of it. Dragging the control point changes the track.



AnyRail checks the track as you shape it and paints it red if:

- You over-stretch it
- You bend it into overly tight curves (likely to derail a train)

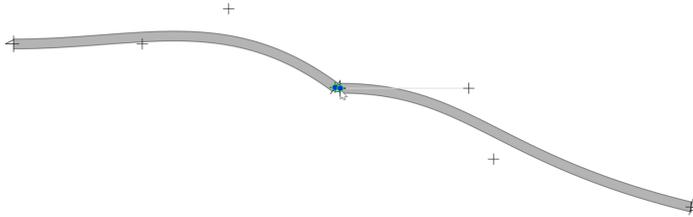
NOTE : Of course, these features can be switched off.

To connect flex track

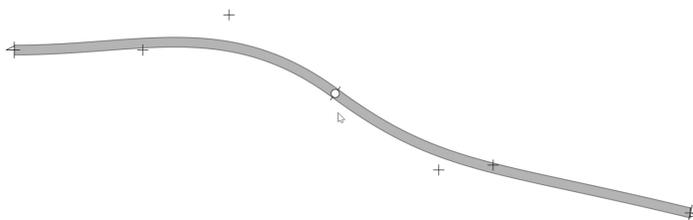
- Connect flex track in the usual way by dragging it near another part.

Or:

- Drag one of the outer control points onto another endpoint.



- ...and release.



AnyRail smoothes out the curves of the resulting track.

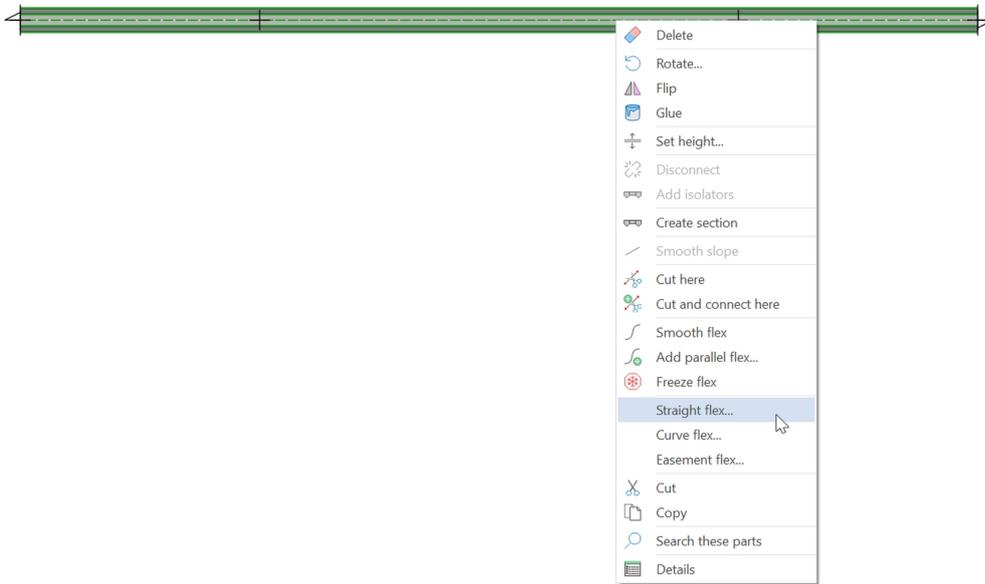
TIP: Pressing SHIFT while dragging a control point keeps it in a straight line.

1.5.2 Curves, straights and easements from flex

AnyRail can create (near) perfect arcs, easements and straights from flex track.

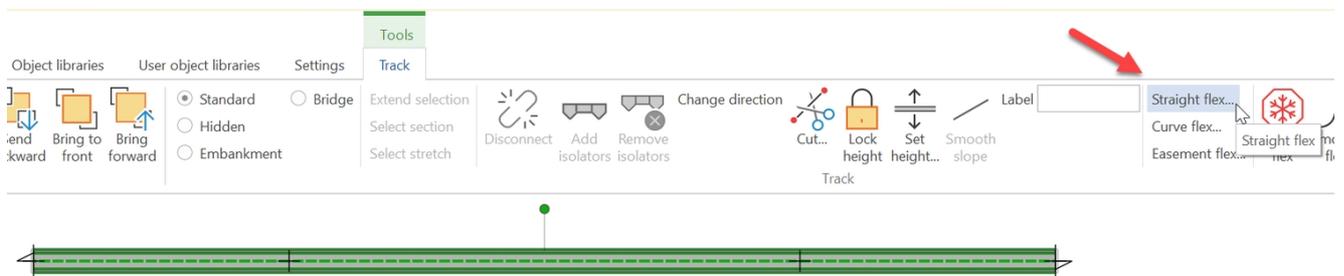
To create a straight, curve or easement

- Right-click the flex and select **Straight flex...**, **Curve flex...** or **Easement flex...**



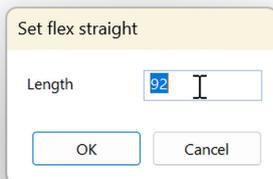
Alternatively:

- Click the flex, and select from the ribbon.



A straight

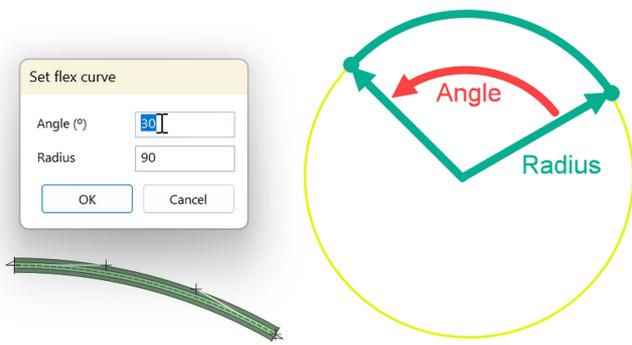
- Set the length.



A curve

Creating a precise curve (circular arc) is similar to straightening a piece of track.

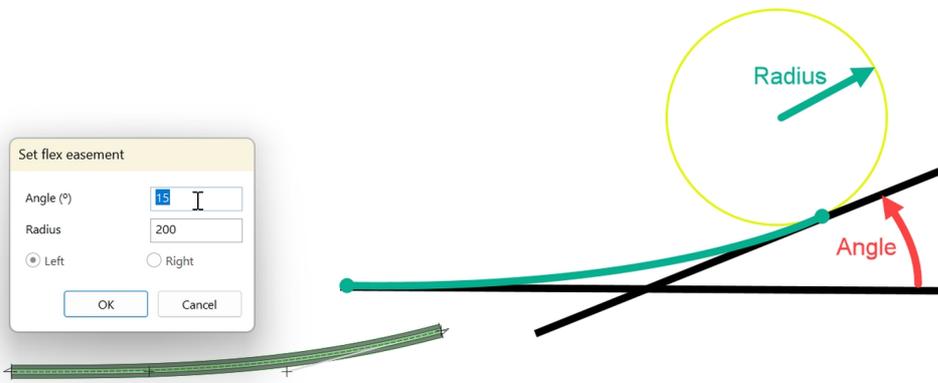
- Set the angle and the radius of the curve.



An easement

An easement provides a smooth transition between a straight and a curve. Real railways always use them to avoid wear and tear, and to permit higher speeds. They also increase passenger comfort.

- Set the angle and the radius of the easement. Don't forget to indicate whether it's a left or right easement.

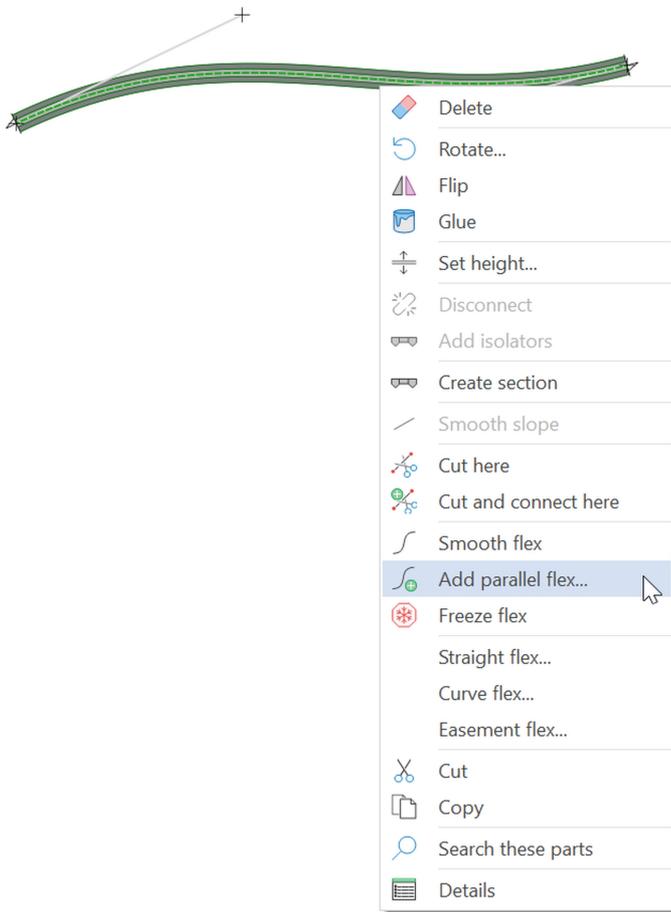


1.5.3 Parallel flex track

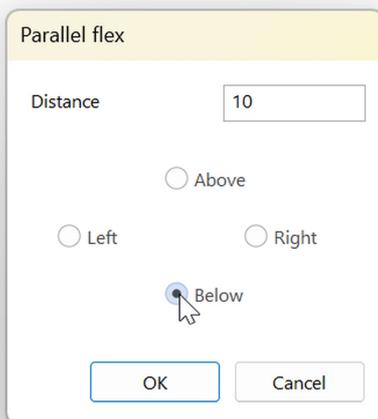
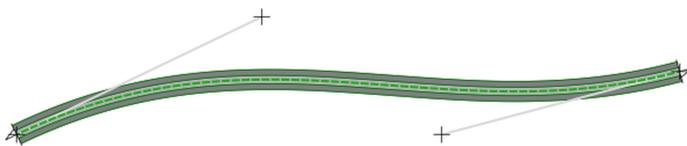
AnyRail can create parallel flex track.

To create parallel track

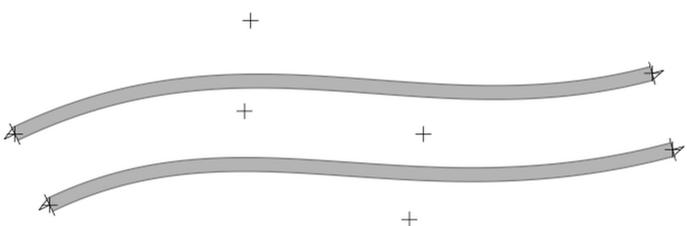
1. Right-click the flex track and select **Add parallel flex...**



2. In the dialog box, set a **Distance** and a position for the new flex track.



3. Click **OK** to see the result.



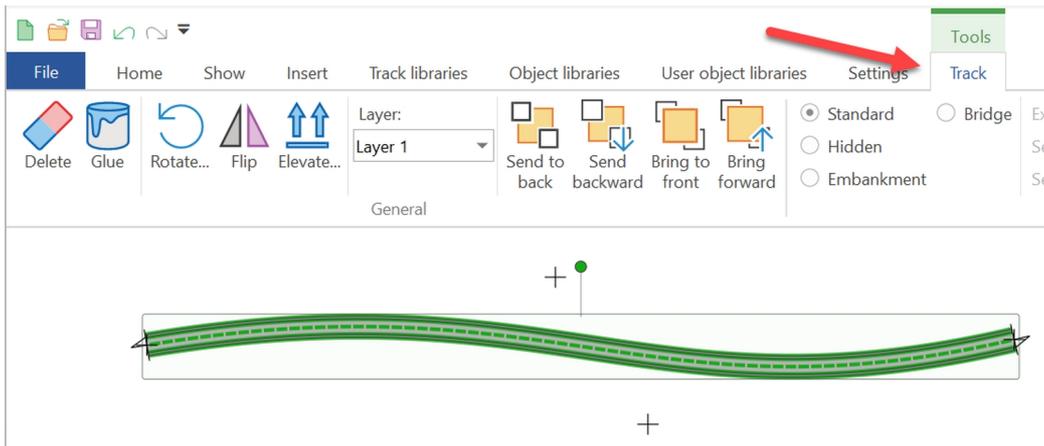
1.6 The ribbon and the popup menu

The ribbon

When you select something, the ribbon shows you what you can do with it and grays out any options that don't apply.

Example 1: Select a flex

A piece of track is selected. The Track tab opens.



Example 2: Select a flex, a surface, and some text

The track, the surface, and the text are selected. A tab for each appears. A fourth tab appears for functions that apply to the selection as a whole. A fifth tab provides grouping functions.

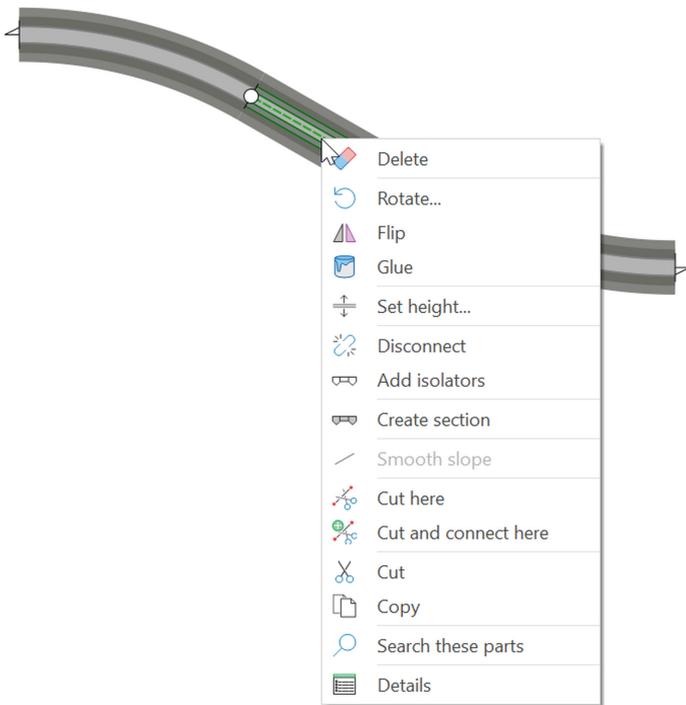


The popup menu

A handy feature of AnyRail is the menu that "pops up" with relevant options whenever you right-click something.

Example 1: Right-click a stretch of track

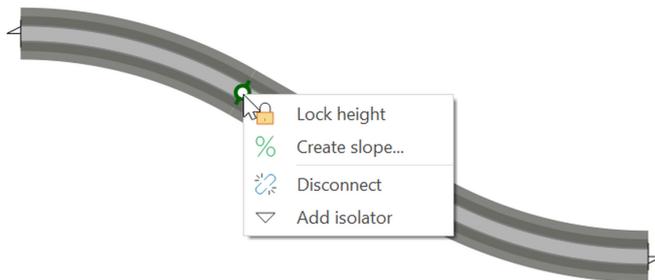
- Right-click to open the popup menu.



Options that don't apply to the selection are grayed out.

Example 2: Right-click a connection

- Right-click to open the popup menu.



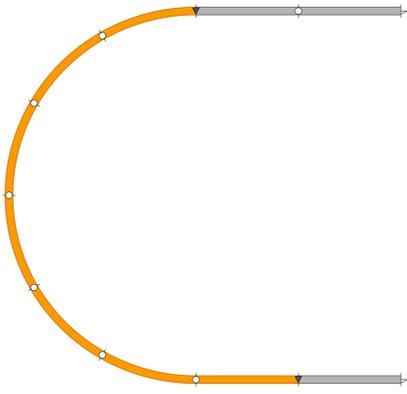
There's a description of each option in the Reference guide. The next couple of chapters cover the more commonly used ones.

1.7 Pieces, stretches and sections

AnyRail thinks of your track as being made up of *pieces*, *stretches* and *sections*.

Pieces and stretches

A *piece* of track is just that – any one of the components you select from the Track Libraries. A *stretch* of track is a piece and all pieces connected to it. Many AnyRail options apply to stretches rather than pieces. A *section* of track is something that *you* create, and requires more explanation.



In orange is a color coded *section*.

Sections

A section is a stretch of track with a specific function or purpose, as defined by you. You can turn any stretch – that is a connected group of pieces - into a section, as long as both ends have an isolator.

Sections are useful in both conventional and digital operation:

- In conventional (analog) operation, you need to feed stretches of track individually to control trains independently of each other. This enables you, e.g., to switch off a section's power to stop a train for a red signal.
- In digital operation, especially with a PC, it is often handy to know where trains are so that the software can control them. Usually, the layout is divided into sections of track, each with its own occupancy detector. The shorter the sections, the more accurate the positional information.

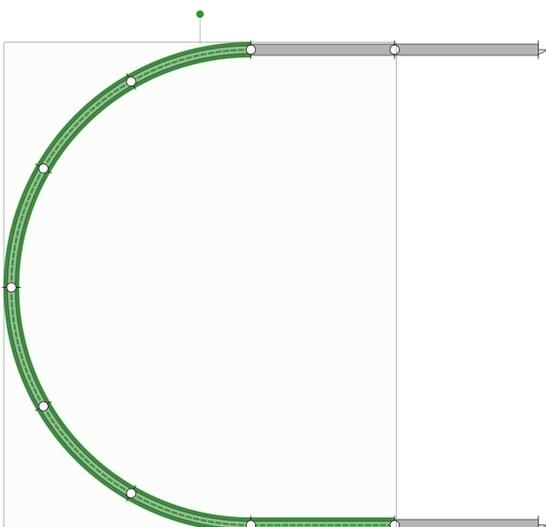
NOTE: Once you've created a section, you can change its properties such as color, name and usage. You can also see a list of sections. This is helpful when calculating how many occupancy detectors you need.

1.7.1 Working with sections

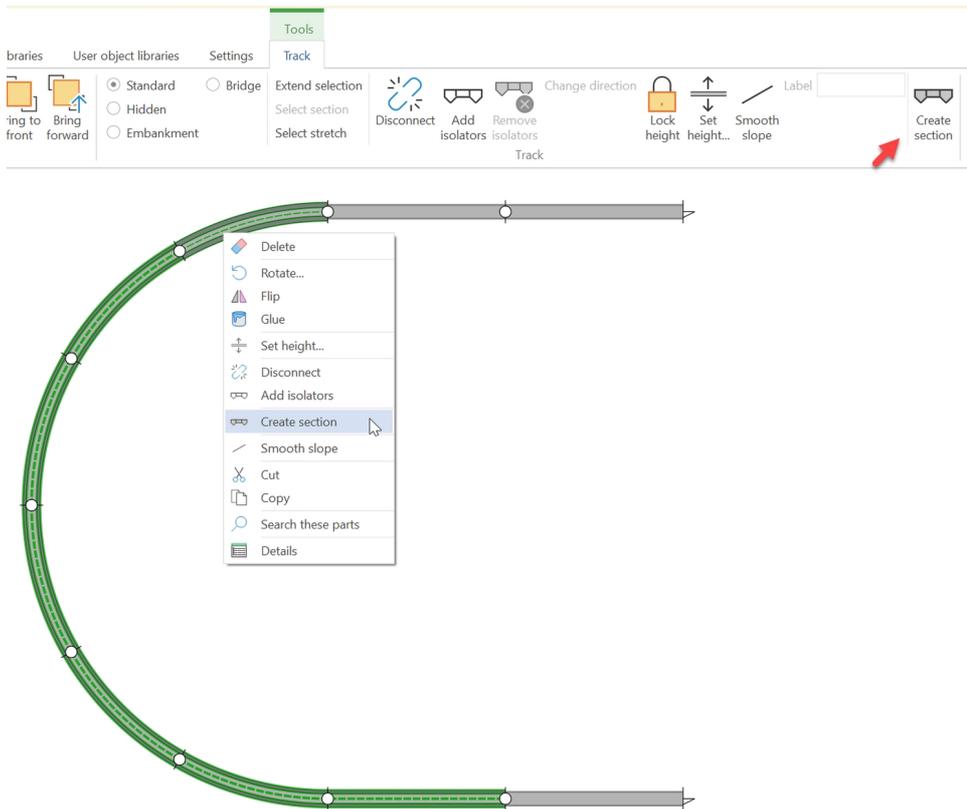
Here are the two methods for creating a section.

Method 1: Creating a section from selected track

1. Select the track for the section.

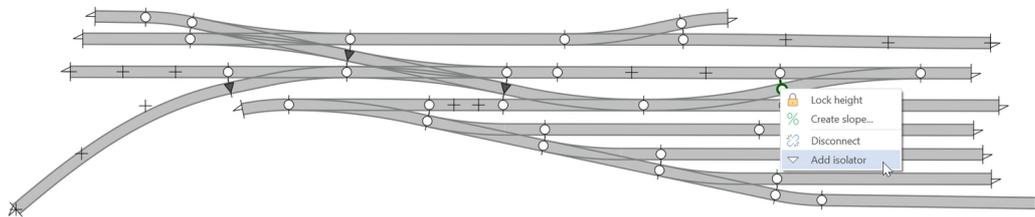


2. Right-click the selected track and click **Create section**. Or just click **Create section** on the ribbon.



Method 2: Creating a section from isolated track

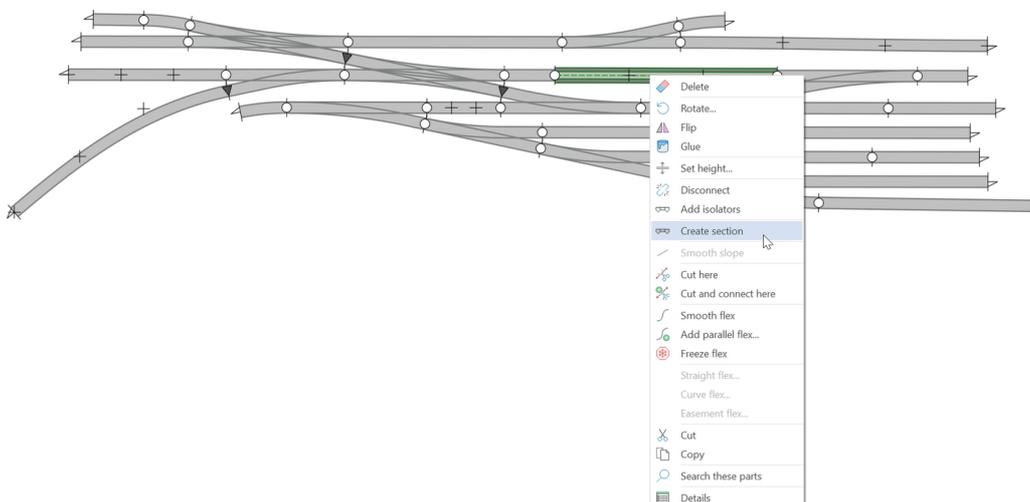
1. Right-click and isolate each connection.



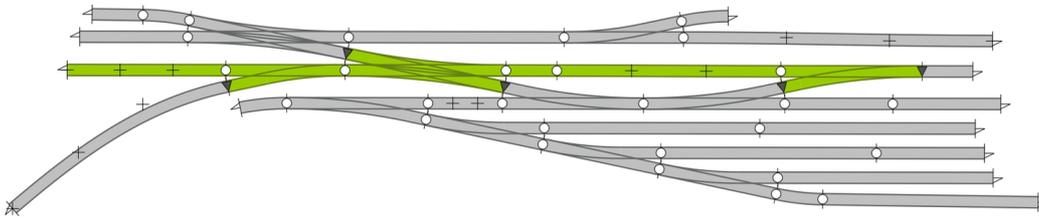
A triangle indicates an isolated connection.

A natural endpoint does not require an isolator.

2. Right-click within the isolated tracks and select **Create section**.



The newly created section changes color:

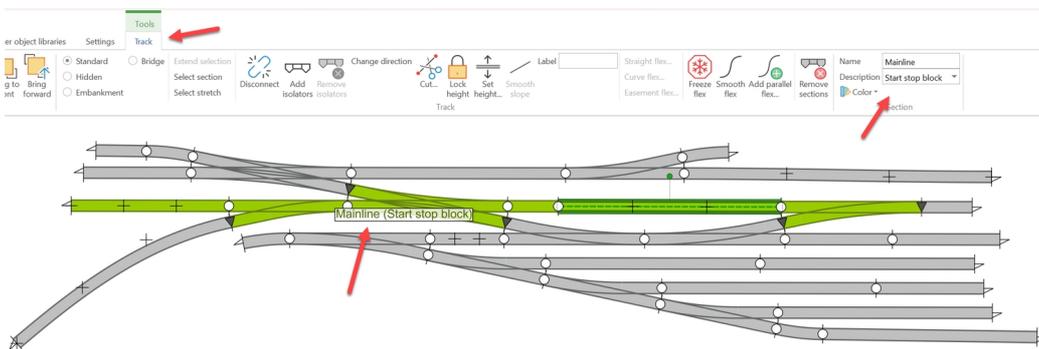


TIP: Of course, you can also use the ribbon to create the section. Left-click one piece of track within the isolated tracks to select it, and click **Create Section** in the ribbon.

To change a section's properties

1. Left-click a piece of track in the section.

The ribbon opens the **Track** tab with a *Section* group:



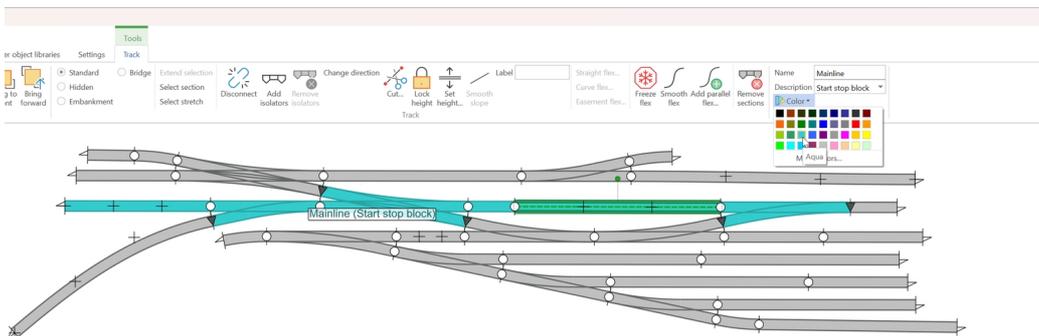
2. Select or enter a **Description** and enter a **Name**.

The name appears on the layout.

The software tries to find the best way to position the text.

To change a section's color

1. In the ribbon **Track** tab, *Section* group, select **Color**.



A selection of colors appears. Click **More colors...** for more choices.

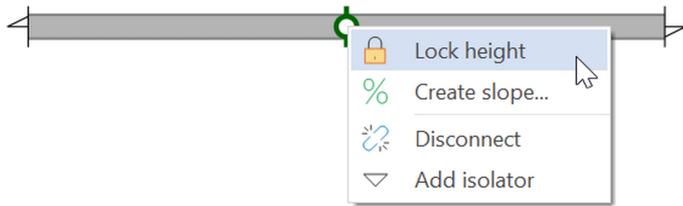
2. Select a color.

The section changes color.

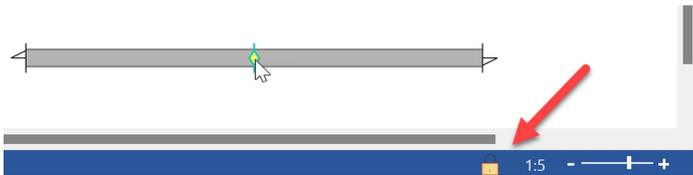
1.8 Working with height

Few model railway layouts are entirely on the same level. Fortunately, AnyRail can handle track at varying heights.

If you want to make sure that the height of a certain point is not changed accidentally, right-click it, and select **Lock height**.



The point turns blue and yellow to indicate that its height is locked:



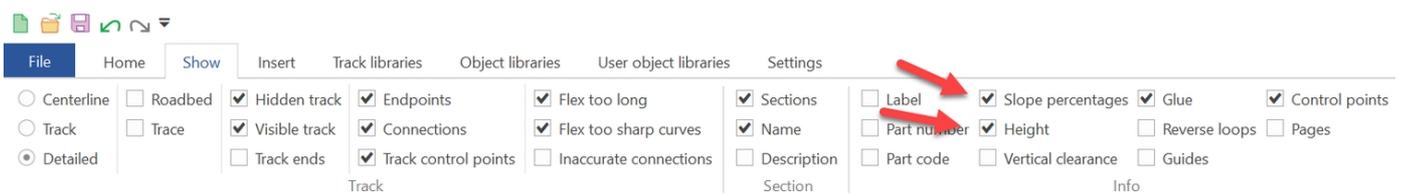
When the height is locked, the connection is colored blue and yellow, and drawn as a diamond. Also, a lock is shown in the status bar when hovered.

1.8.1 Displaying heights

Before working with heights, it helps to switch on their display.

To display heights

1. In the ribbon **Show** tab, find the *Info* group:



2. Tick **Slope percentages** and **Height**.

Heights and slopes now appear on the track:



1.8.2 Specifying heights

There are various ways to create a slope, or set the height of track.

As it can be on a slope, a piece of track doesn't necessarily have a single height. AnyRail works out the height based on the track's endpoints and connections.

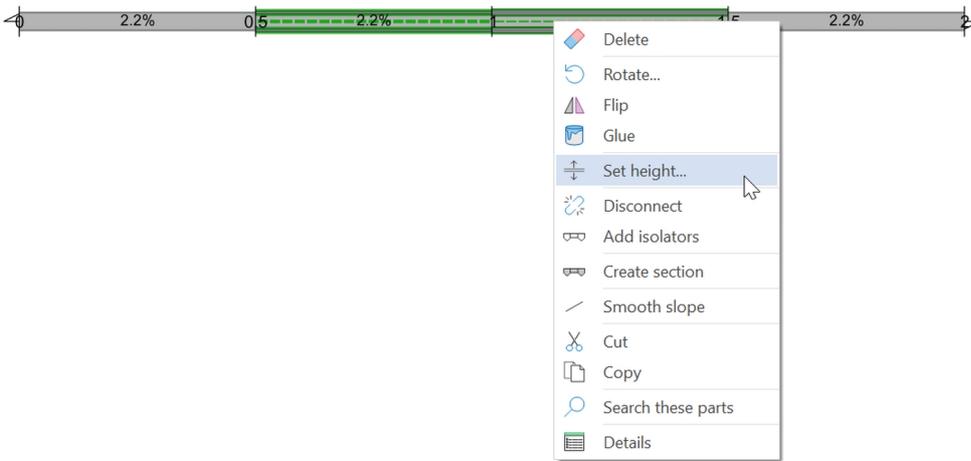
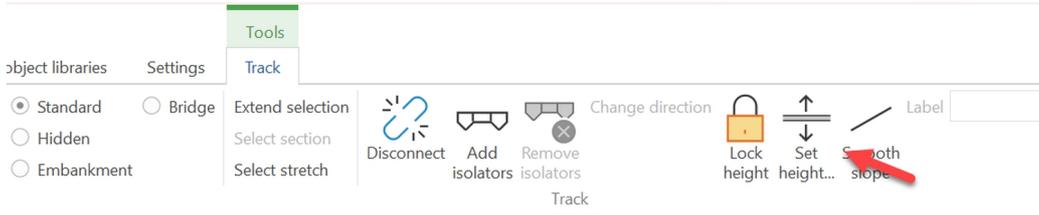
You can specify a certain height for a stretch of track, and then ease the connected track into sensible gradients.

AnyRail will show a warning if slopes are too steep.

TIP: If your tracks cross, make sure you leave enough headroom for the lower train, and any possible overhead lines! Bear in mind the thickness of the tracks, the sleepers, and the actual bridge.

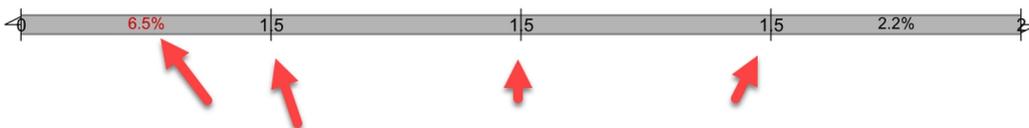
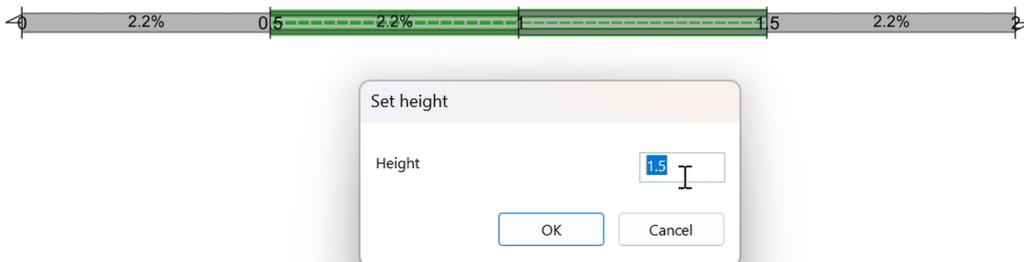
To set selected track to a certain height

1. Right-click the selected track, and click **Set height...**



Or just click **Set height...** on the ribbon.

2. Enter a value for the height.



AnyRail has set the height to the given value.

NOTE: Steep gradients are displayed in red.

To specify a height for a point

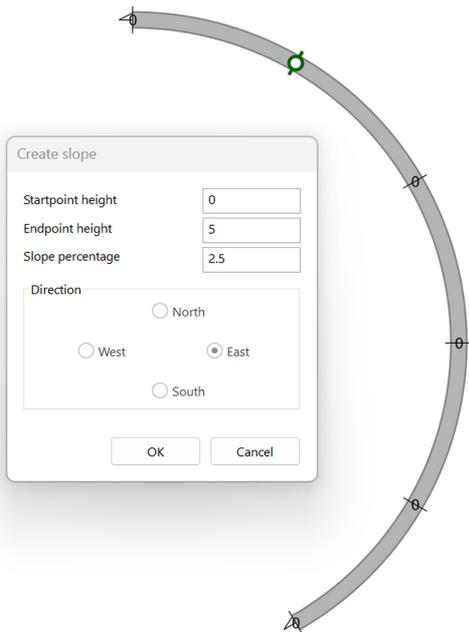
This function is useful when you want to set the height of an individual point.

- Click the point (this is an endpoint or a connection), and set the **Height** on the ribbon.

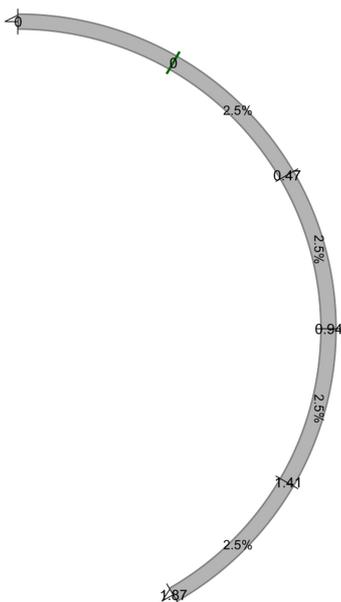
To create a slope

This function creates a slope starting from a connection or an endpoint.

1. Right-click the point (this is an endpoint or connection), and select **Create slope...**
2. Enter heights for startpoint, endpoint and slope percentage. Select the direction in which to create the slope from this connection.



AnyRail created the slope:



To create a smooth slope

Sometimes, it's useful to create a slope between two points, where AnyRail calculates a linear descent percentage. This is called a smooth slope.

There are a few restrictions when creating a slope from point A to point B.

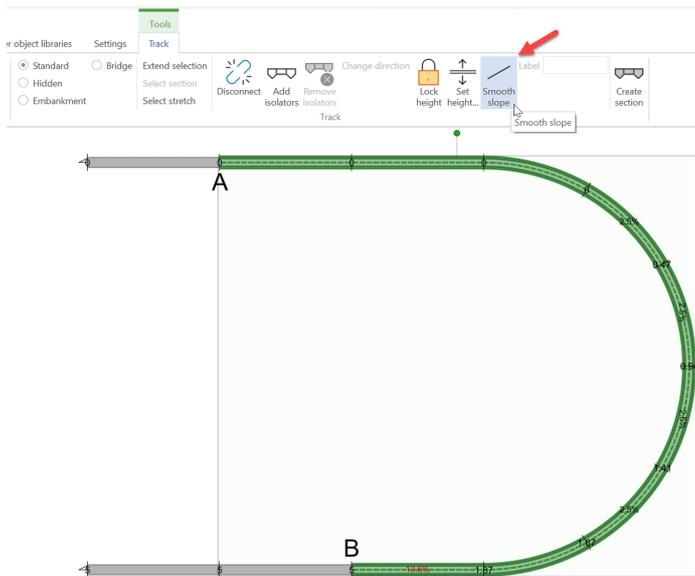
- All the track on the slope should be connected.
- There should be only one 'path' from A to B.
- The path may go through turnouts and crossings, but the path may not split to a third point.

NOTE: This feature works best when A and B have a different height!

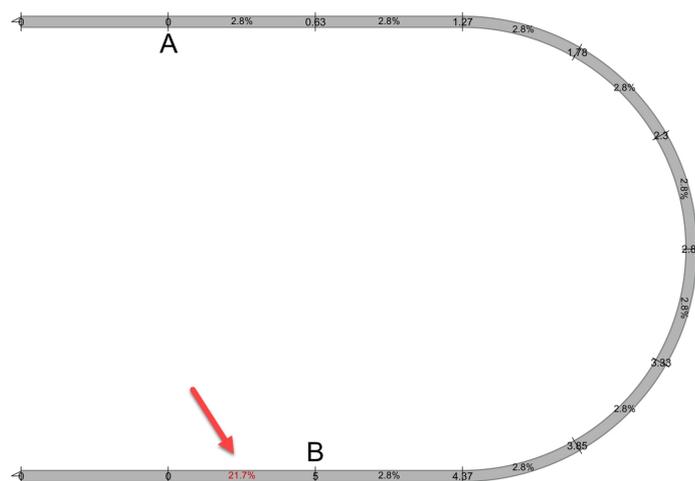
Example

The height of point A is 0. The Height of point B is set to 5.

1. Select the stretch for which you want a smooth slope.
2. Click **Smooth slope** to create a linear slope.



The height at each point is calculated to make a smooth slope:



Too steep slopes are displayed in red.

To set the maximum percentage for slopes

All gradients exceeding this value are displayed in red.

1. Open the ribbon **Settings**, and locate *Slopes*.



2. Set **Maximum %**.

1.9 The status bar

There's a lot to keep track of if you use all of AnyRail's features. The good news is that the status bar is a mine of information:



See below for the meaning of each field.

To customize the status bar

- Right-click the status bar to change the active fields.



1.10 More than just track

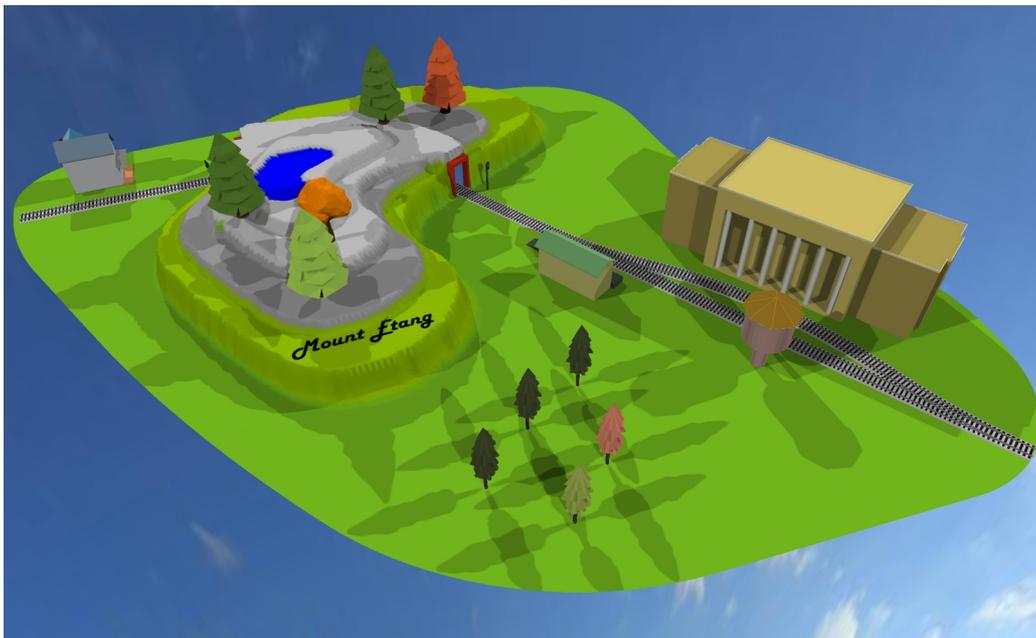
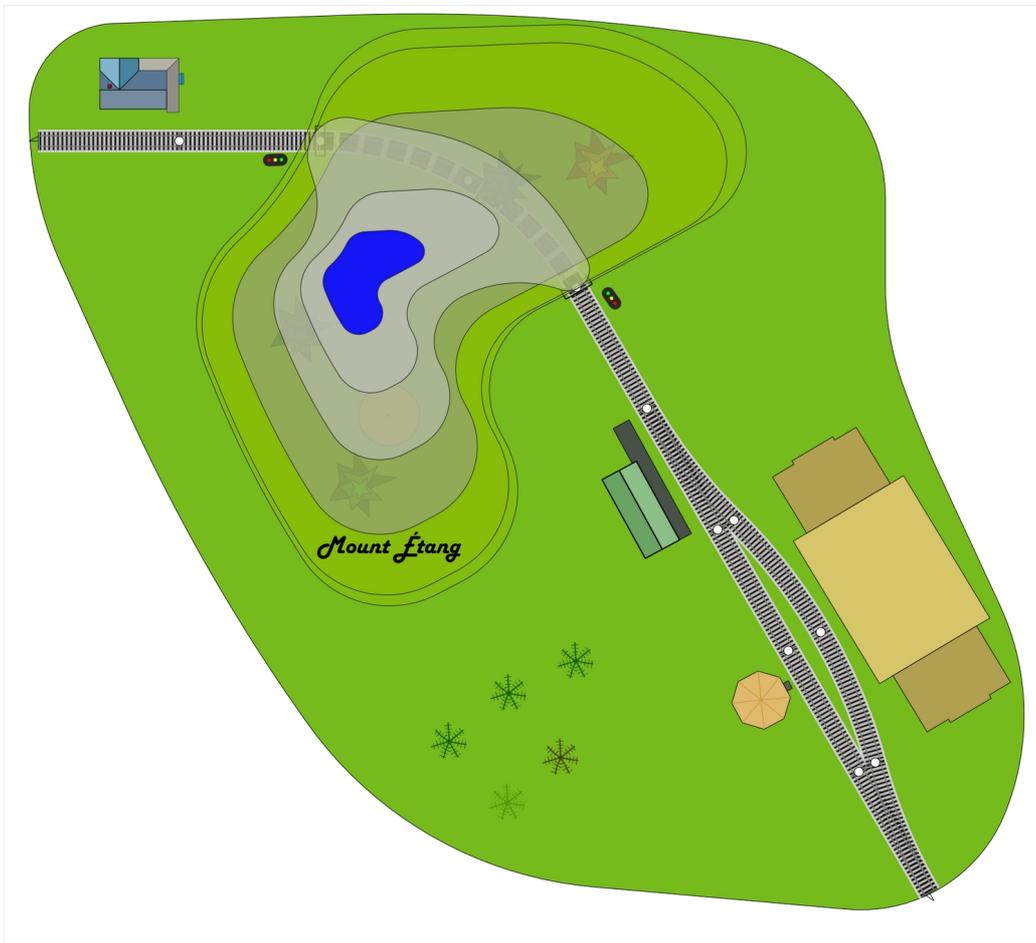
Being enthusiasts ourselves, we suspect that your layout will contain more than just track!

For this reason, AnyRail enables you to draw shapes onto your layout to represent scenery, such as stations or landscape features.

Of course, you can draw your train table or your garden.

You can also mark track as hidden, and add text labels and position them as required.

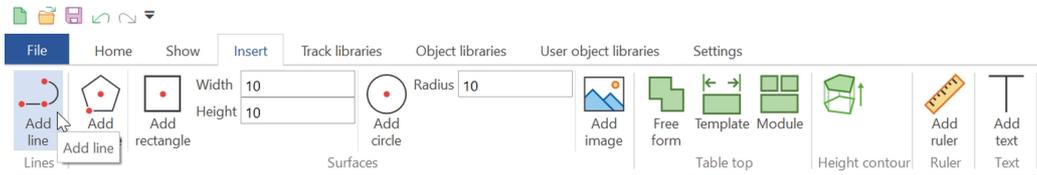
Additionally there are plenty of predefined elements.



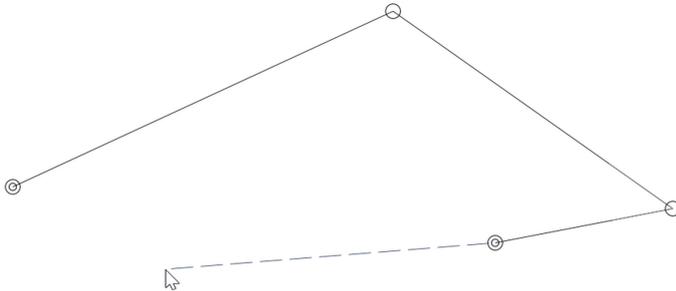
1.10.1 Adding lines and surfaces

To add a line

1. Open the Insert tab.
2. Click **Add line**.



3. Click for each point on the line.

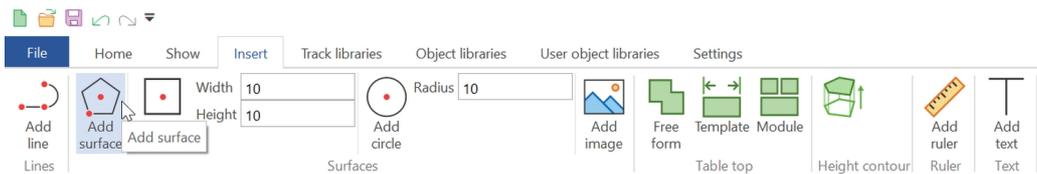


4. Double click to finalize.

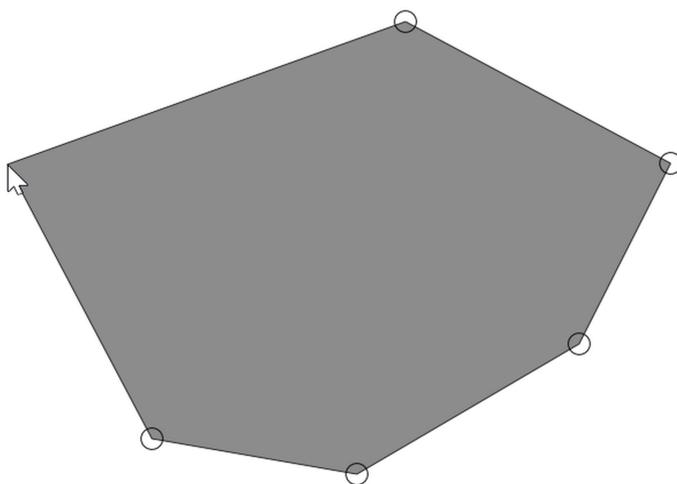
TIP: You can also right-click on the work area, and select **Add line** from the popup menu.

To add a surface

1. Open the **Insert** tab.
2. Click **Add surface**.



3. Click for each corner.

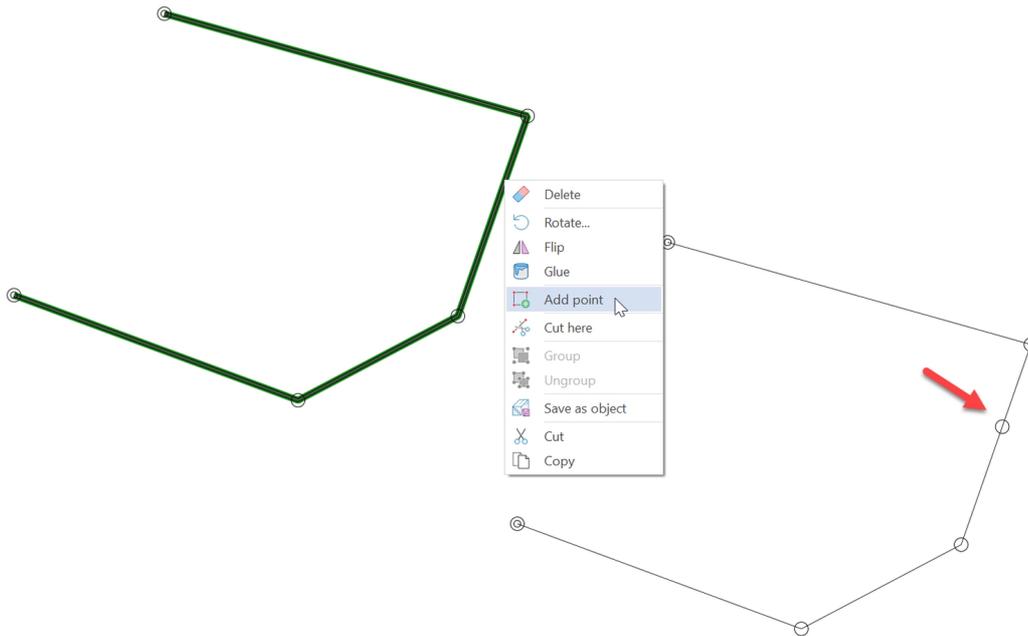


4. Double click to finalize.

TIP: You can also right-click on the work area, and select **Add surface** from the popup menu.

To add a point to the line or surface

1. Right-click where you want to add a point.
2. Select **Add point**.

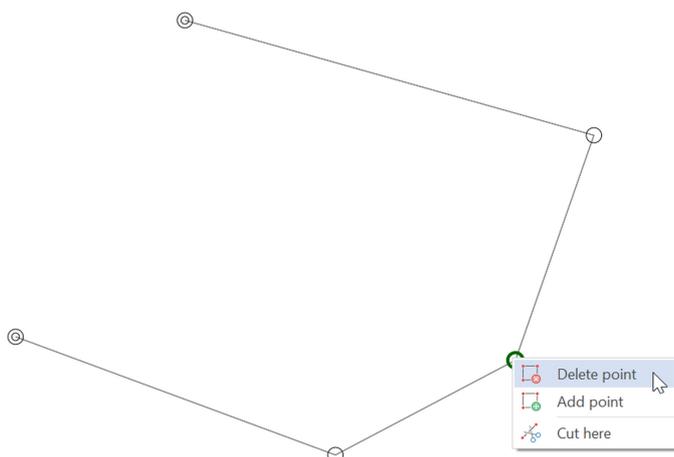


A new point is added.

TIP: You can add a point by hovering over the line and pressing 'p'.

To delete a point

1. Right-click the point.
2. Select **Delete point**.



TIP: To quickly delete a point, click it and press *Delete*.

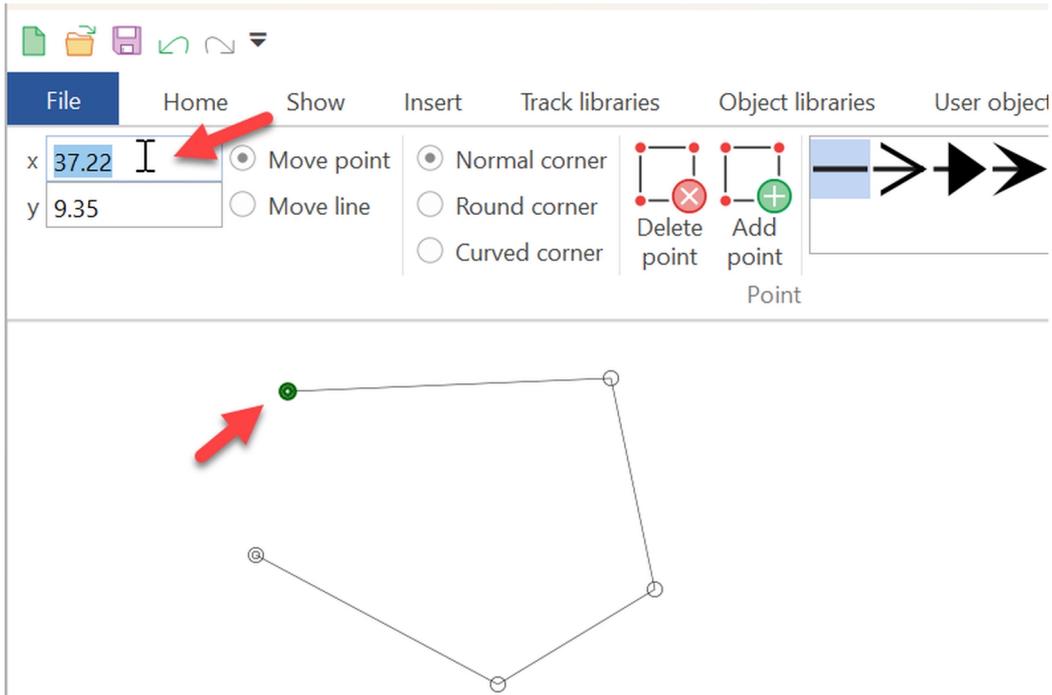
To move a point

- Simply drag the point to move it.

To position a point

Sometimes you need to precisely position a point.

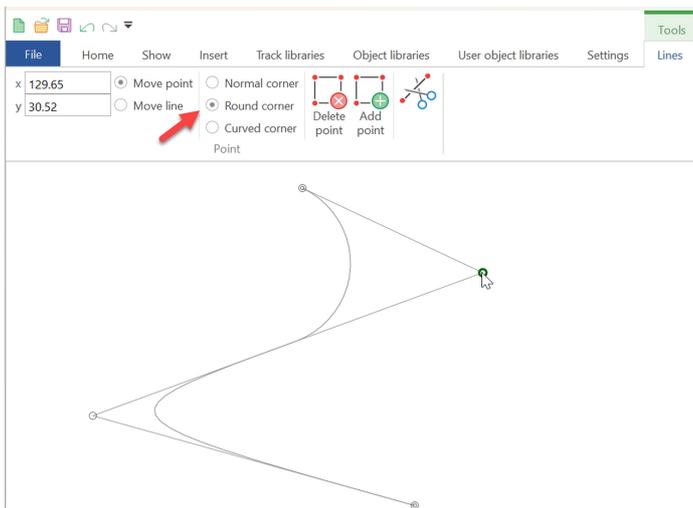
1. Click the point to activate it.
2. Enter the precise x and y position.



To create round corners

You can create round or curved corners for points that have neighboring points. The points at the end of the line cannot be set to round or curved.

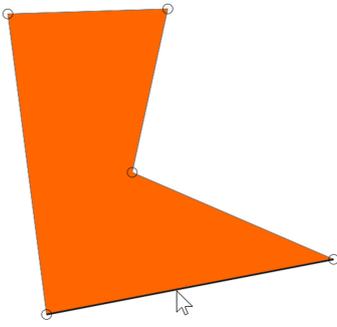
- A *Round corner* is a perfect arc. A part of a circle.
- A *Curved corner* is a curve halfway to each neighboring point.



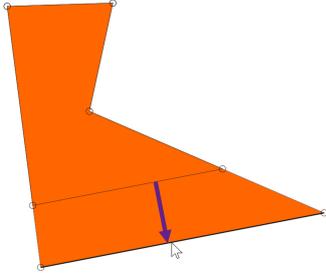
1.10.2 Manipulating surfaces

This topic covers a few special functions for surfaces.

To move a line

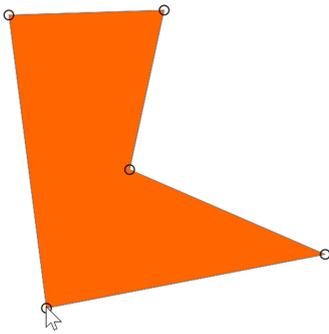


1. Hover on a line and press *SHIFT*. The line becomes bold.

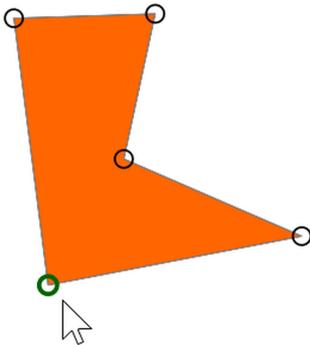


2. Drag the line while holding down *SHIFT* to change the shape.

To resize the shape



1. Hover on a point and press *SHIFT*. All the shape's points light up...



2. Drag the point to enlarge or shrink the shape.

1.10.3 Adding text

You can place text anywhere on your layout plan, for example to label features or make notes to yourself.

To add text

1. Find the ribbon **Insert** tab, and click **Add Text**.
2. Click in the work area.
3. Enter your text and press *Enter*.

NOTE: Depending on the scale of your drawing, the initial text may be very small. To change the size, left-click the text, and set the size in the ribbon.

NOTE: To create a newline, use *SHIFT-Enter*.

To change the appearance

- Left-click on the text and select one of the options from the ribbon **Text** tab.

To edit existing text

- Double-click the text.

To move the text

- Place the cursor on the text, left-click and hold to drag the text.

You can also add names to sections of track. See [Working with Sections](#).

1.10.4 Adding rulers

To add a ruler

1. Find the **Insert** tab, and click **Add Ruler**.
2. Click in the work area.
3. Size the ruler by dragging its end points.

To change the appearance

- Left-click on the ruler and select one of the options from the ribbon **Rulers** tab.

To move the ruler

- Place the cursor on the ruler, left-click and hold to drag the ruler.

1.10.5 Predefined elements

AnyRail has a number of predefined elements that you can find in the **Object Libraries** tab.

These include:

Scenery elements

H0 General scenery 🔍 ×

Part number Description

Small track icons Short tooltips

T1.1	T1.2	T1.3	T1.4	T2.1	T2.2
T3.1	T3.2	T3.3	T4.1	T4.2	T4.3
S1.1	S1.2	S1.3			

Signals

Z Viessmann Signals 🔍 ×

Part number Description

Small track icons Short tooltips

4800	4801	4806	4807	4809	4810	4811
4812	4813	4817	4818			

H0 N.J.International Signals 🔍 ×

Part number Description Small track icons Short tooltips

1020	1023	1031	1032	1033	1036	1038	1040	1041	1053
1054	1055	1056	1060	1081	1082	1083	1088	1100	1110
1130	1140	1210	1220	1341	1342	1343	1346	1347	1348
1349	1350	1351							

Structures

H0 Walthers Structures 🔍 ×

Part number Description

Small track icons Short tooltips

2829	2850	2851	2840	3171	2900	3022	3028
3029	3041	3064	3094	3182M	3182T1	3182T2	3527
3531	3533	3601	3606	3619	3620		

1.10.6 Groups

You can combine lines, surfaces and text into a Group. Other types of elements cannot be grouped.

To create a group

1. Select all the elements that should form the group.
2. Open the **Groups** tab that appears.
3. Click Group.

NOTE: Track cannot be grouped.

1.11 Layers

AnyRail layers let you show or hide different parts of your layout plan while you're working on it, e.g. to hide scenery while working on track.

It's up to you how to arrange them. A layer can contain all sorts of elements, on all heights. (Really, a layer is just an arbitrary group of elements.)

There is always one active layer. This layer is always visible. New elements are always added to the active layer.

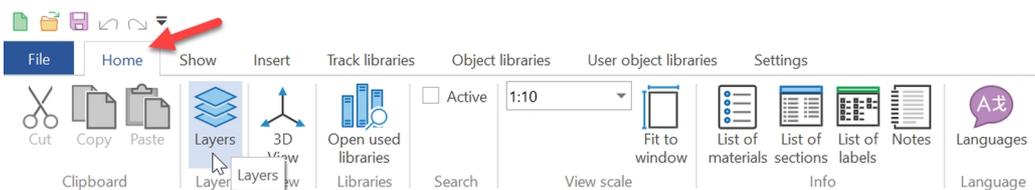
1.11.1 The Layers pane

Maintain your layers using the Layers pane.

From this pane, you can add, delete, and rename layers. You can also pick which layers are visible.

To add a layer

1. Navigate to the **Home** tab.
2. Click **Layers**.



3. Click **Add layer**.



To remove a layer

- In the layers pane, click the little red cross to delete a layer.

CAUTION: Deleting a layer deletes all the elements it contains! If you press **Delete layer** by accident, you can always use **Undo** (*Ctrl-Z*).

To rename a layer

- In the layers pane, double click the layer name so you can edit it.

NOTE: AnyRail makes sure that each layer has a unique name.

To make a layer visible or invisible

- In the layers pane, click the lamp in front of the layer name.

NOTE: You cannot make the active layer invisible.

To lock a layer

- In the layers pane, click the padlock in front of the layer name.

NOTE: You cannot lock the current layer.

NOTE: The active layer is bold and has a green background.

TIP: Click a layer name to make it the active layer.

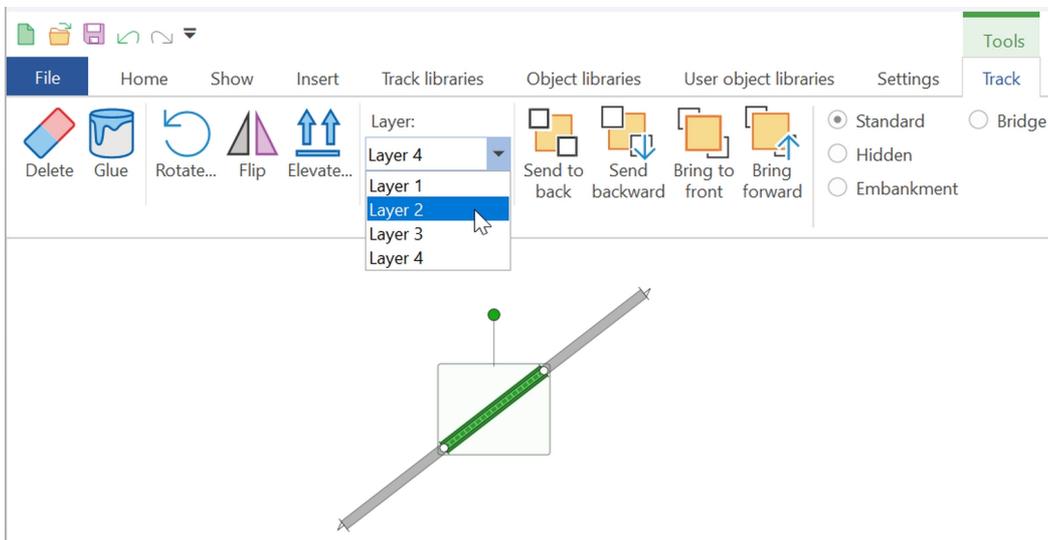
1.11.2 Moving objects to another layer

Of course, it might happen that you decide to move something to another layer. That's easy.

To move objects to another layer

1. Select the objects.
2. In the ribbon, select the target layer.

Example

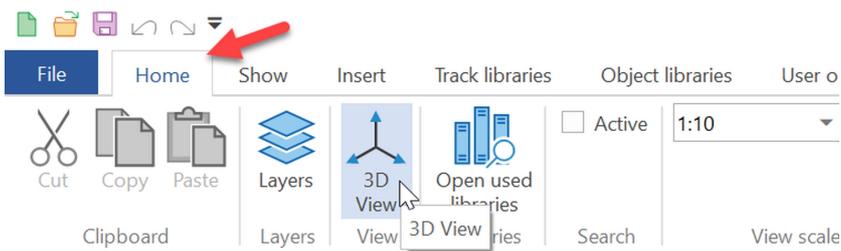


1.12 3D Viewer

AnyRail provides a way to get a 3D impression of your design.

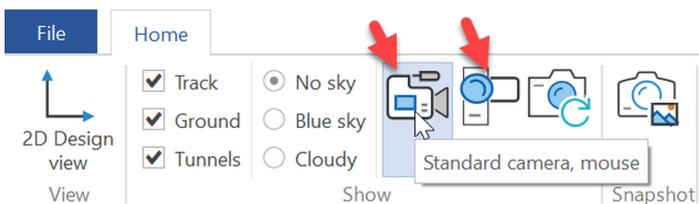
To go to the 3D View

- Click **3D View** on the **Home** tab.



1.12.1 Navigating

The 3D viewer provides two different cameras.



Standard camera

This camera allows you to quickly go around the layout using the mouse only.

The camera is aimed at one point, initially at the center of your layout, the pivot point.

To navigate

- Use the mouse wheel to zoom in and out

- Hold down the left mouse button and move the mouse to move around the focal point. The pivot point remains the same.
- Hold down the right mouse button and move the mouse to pan. This changes the pivot point.

FPS camera

This camera works much like the camera in a *First person shooter* type of game. You can move around, and just get to see whatever you look at. You need to use the mouse and the arrow keys on your keyboard.

To navigate

- Hold down the left mouse button and move the mouse to change the viewing direction.
- Use the arrow keys to move forward, backwards, and sideways. Hold down the right mouse button to double your speed.

Tip: In case you get lost, click the **Camera back to starting point button**.

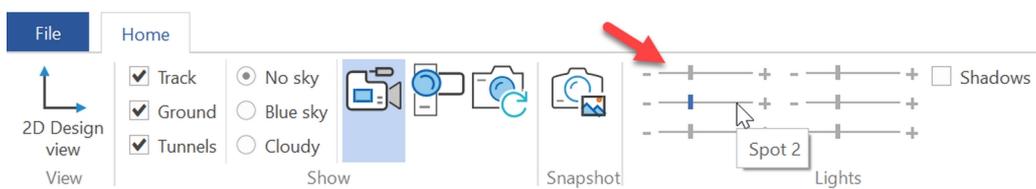


1.12.2 Lights

You can change the lights for the scene.

There is a light at each corner, a top light, and ambient light.

- Move sliders to change the light.

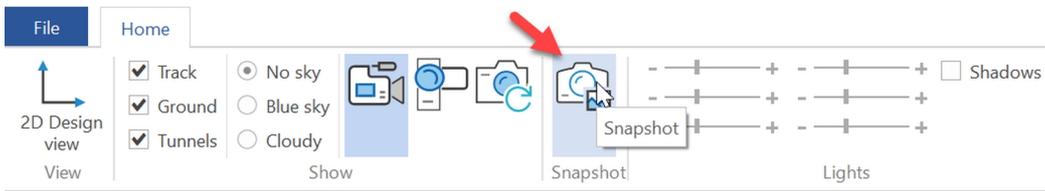


1.12.3 Snapshot

You can take a snapshot of the 3D view at any time.

To make a snapshot

- Click the snapshot button.



1.13 User objects

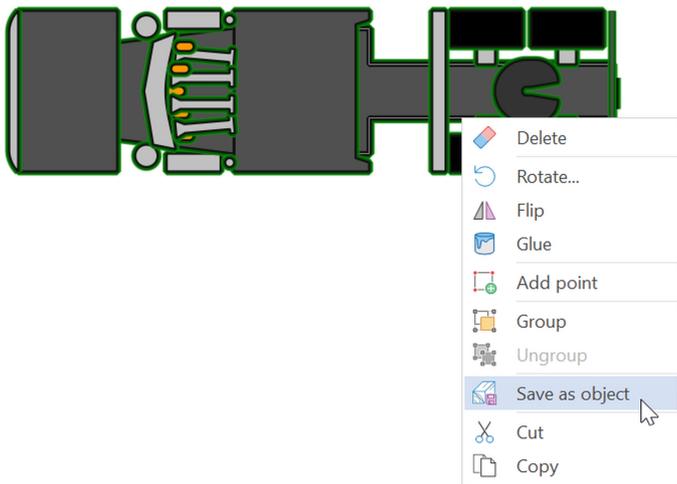
You can save your creation as a *user object* for later reuse. You can even share user objects with other AnyRail users.

1.13.1 Creating a user object

You can create a user object out of a single line or surface, or from any *group* which can contain lines, surfaces and text.

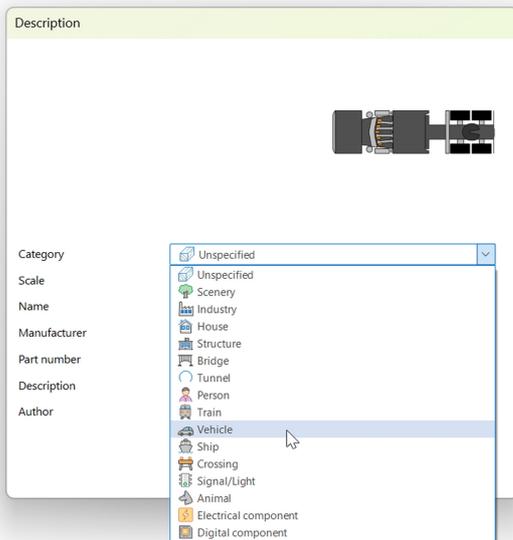
To create a user object

1. Right-click the group and select **Save as object**.

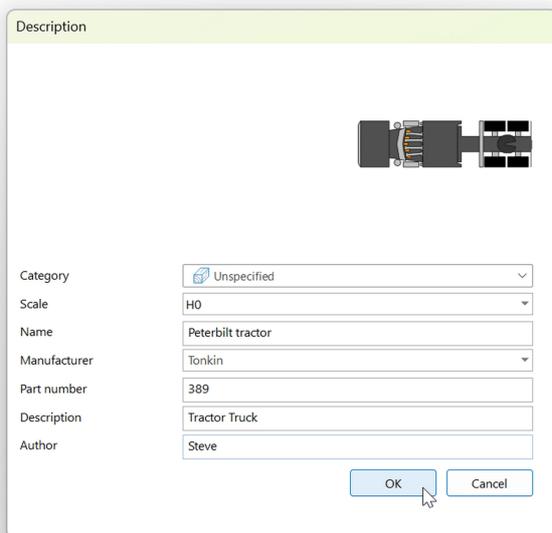


A dialog appears.

2. Select a category and fill out the other fields.



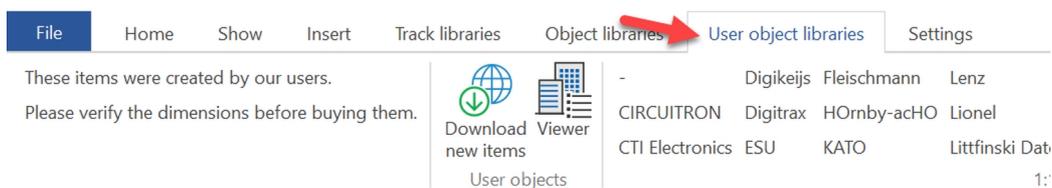
3. When done, click OK.



The user object is added to the correct library in the **User object libraries** tab.

1.13.2 Managing user objects

To take a look at your user objects, open the **User object libraries** tab.



To update your user objects

1. Make sure you have a working internet connection.

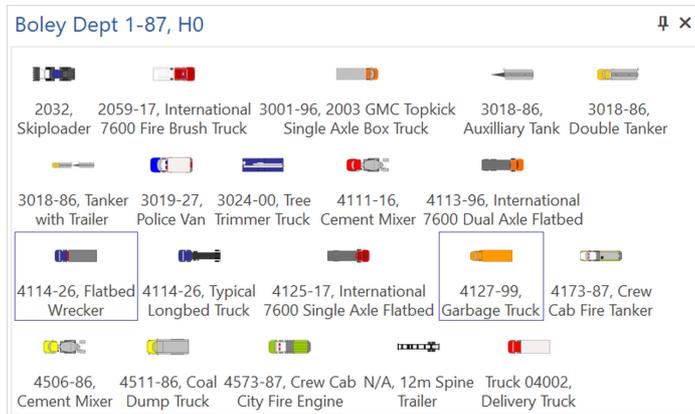
2. In the User object libraries tab, click **Download new items**.

To open a library of user objects

The items are ordered per scale, per manufacturer in alphabetical order.

- Select a library to open it.

The user objects are displayed just like the regular track items.

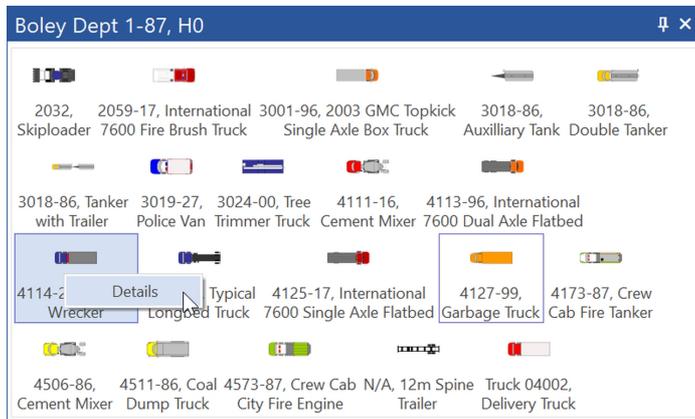


NOTE: Your own objects have a blue border.

To share a user object

If you've created an object you want to share, you can upload it to the AnyRail servers.

1. Right-click the object's button and click **Details**.



2. Check the details one more time and click **Share (upload)**.

Details



Category:

Scale:

Name:

Manufacturer:

Part number:

Description:

Author:

Buttons: Delete, Share (upload), OK, Cancel, Reset

3. Please read the warning carefully before you click OK.

Warning



You agree to DONATE this object to the Public Domain (The whole world) and will not make any claims to ownership after it is uploaded.

Buttons: OK, Cancel

NOTE: Other people won't see your objects right away - we have to approve them first.

1.14 Finishing up

Once you've completed the design, you'll need to get it in some sort of usable form. It's simplest just to print the layout. However, you can also save parts of it as pictures – useful for emailing your friends or to publish your track plan on a forum.

In addition, you can view lists of materials and sections.

1.14.1 Saving your work

You can save AnyRail design files just as you would with any other Windows software. You might also find **Save as** useful for recording different stages of your design.

To save your file

- From the **File** tab, select **Save**.

To save your file with a new name and location

- From the **File** tab, select **Save As**. A standard file window opens, allowing you to save a copy of your file. The old one is untouched.

Auto-save

AnyRail auto-saves your work every 10 minutes in a separate folder. If AnyRail closes in a normal way, these auto-saved files (except for one) are deleted to preserve disk space.

In case your computer crashes, or if AnyRail terminates in an unexpected way, you can find a recent copy in the **Autosave** folder.

To find an auto saved file

1. Open the **File** tab.
2. Select **Help**.
3. Click the button tagged **Autosave Folder**.

NOTE: The most recent file you find is probably your best choice.

1.14.2 Print preview

Color ink is expensive! Also, it can be annoying to wait while a design prints out, only to discover that the settings were not quite right. For this reason, AnyRail enables you to see what your printout is going to look like.

To preview your printout

- From the **File** tab, click **Print**. AnyRail displays a preview of your printout.

1.14.3 Printing your design

To print your design

1. From the **File** tab, select **Print**.
2. Review your settings and click the **Print** button.

The design prints at the specified scale, using several pages if required.

NOTE: Printing a large layout in a large scale takes a lot of processing power and resources. Each page is a picture, so it might take a while depending on your computer.

TIP: To print your layout to real size, set the view scale to 1:1. However, before clicking **OK**, check the number of pages it will take!

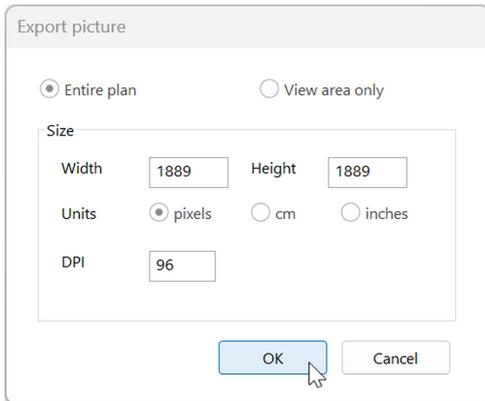
1.14.4 Generating pictures

You can either create a picture of whatever is in view, or of the complete plan.

To generate pictures

1. If required change the view scale. The scale slider is in the lower right corner of the status bar.
2. Use the scroll bars to get the exact picture you want if you need to crop the layout.
3. From the ribbon **File** tab, select **Export As**, then in the right pane, click **Picture**.

A window appears:



4. Click **OK**. A standard File window opens.
5. Save the file in the required graphics format.

WARNING: THIS IS NOT THE SAME AS SAVING YOUR TRACK PLAN! These pictures cannot be reloaded into AnyRail.

1.14.5 Generating a 3D file

You can generate a 3D file that can be imported into most 3D drawing programs. The available formats are: stl, dae, ply, 3ds, stp and obj.

To create a 3D File

1. Open the **File** tab.
2. Select **Export as**.
3. Select **3D File**.
4. Choose which categories you wish to export.
5. Type or select a file name, and press **Save**.

1.14.6 Generating a TrainPlayer file

You can generate an intermediate file that can be imported by *TrainPlayer*, a program that simulates running trains on a layout. For more information, please go [here](#).

To create a TrainPlayer file

1. Open the **File** tab.
2. Select **Export as**.
3. Select **TrainPlayer export file**.
4. Type or select a file name, and press **Save**.

1.14.7 Generating a list of materials

The list of materials contains all the track you've placed on the layout. It also shows the total track length, and the track length per track element.

To generate a list of materials

1. Open the **Home** tab.
2. Here, select **List of materials**.

The list of materials opens:

List of materials

Combine flex

*Track	
2501, N Atlas Code 80, Straight 4 7/8".	2
2510, N Atlas Code 80, Curve radius 9 13/16", angle 30°	2
2511, N Atlas Code 80, Curve radius 9 13/16", angle 15°	50
2513, N Atlas Code 80, Straight 4 7/8". (bulk)	12
2515, N Atlas Code 80, Curve radius 11 3/32", angle 30° (bulk)	7
2517, N Atlas Code 80, Straight rerailer 4 7/8". (bulk)	11
2521, N Atlas Code 80, Curve radius 11 3/32", angle 15°	42
2701, N Atlas Code 80, Right turnout 4 7/8". 15° (remote)	3
2702, N Atlas Code 80, Left turnout 4 7/8". 15° (manual)	2
*Track lengths	
2501, N Atlas Code 80, Straight 4 7/8".	9 25/32
2510, N Atlas Code 80, Curve radius 9 13/16", angle 30°	10 1/4
2511, N Atlas Code 80, Curve radius 9 13/16", angle 15°	128 5/32
2513, N Atlas Code 80, Straight 4 7/8". (bulk)	58 3/4
2515, N Atlas Code 80, Curve radius 11 3/32", angle 30° (bulk)	40 21/32
2517, N Atlas Code 80, Straight rerailer 4 7/8". (bulk)	53 27/32
2521, N Atlas Code 80, Curve radius 11 3/32", angle 15°	121 15/16
2701, N Atlas Code 80, Right turnout 4 7/8". 15° (remote)	29 9/16
2702, N Atlas Code 80, Left turnout 4 7/8". 15° (manual)	19 11/16
*Total track length:	39'-4 21/32"
*Connections	129

Save... Print... Close

TIP: Copy and paste the list into a spreadsheet for further processing.

1.14.8 Generating a list of sections

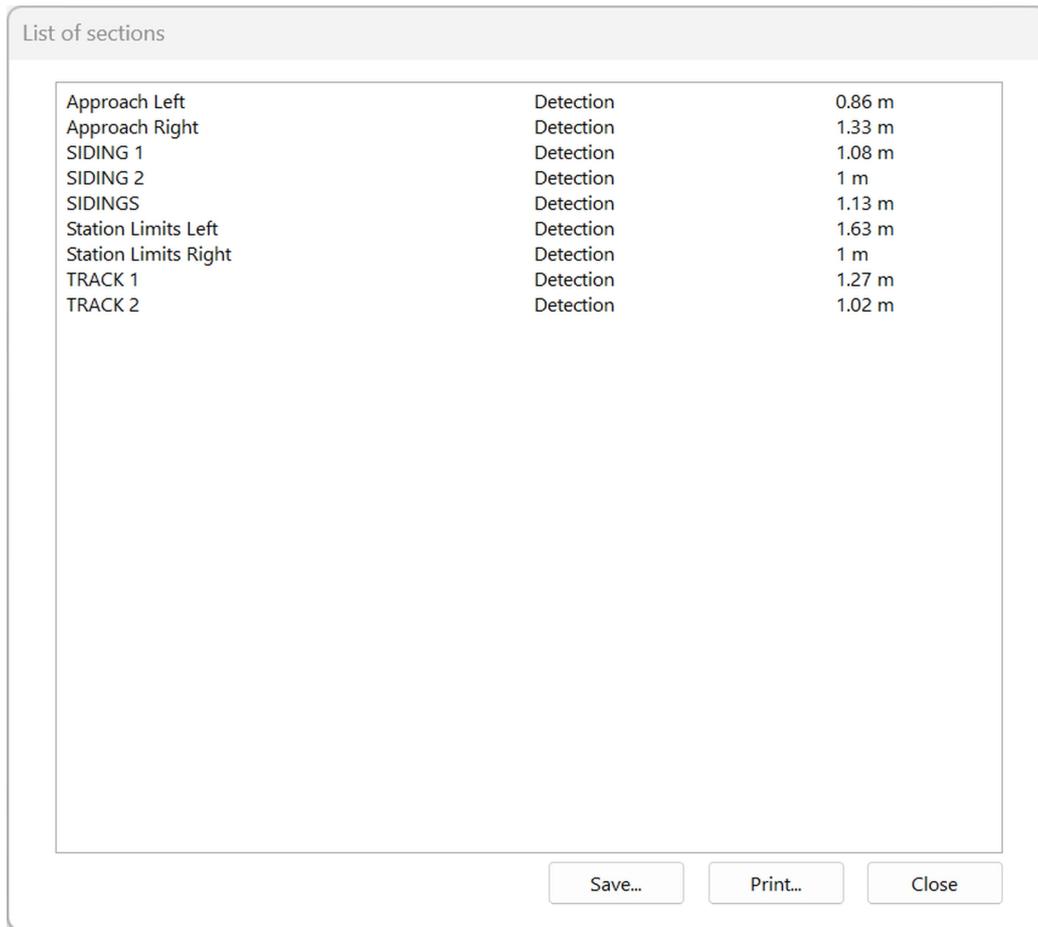
The list of sections is very useful when assigning occupancy detectors.

To generate a list of sections

1. Open the **Home** tab.

2. Here, select **List of sections**.

The List of sections opens:



The screenshot shows a dialog box titled "List of sections" with a table containing the following data:

Section	Detection	Distance
Approach Left	Detection	0.86 m
Approach Right	Detection	1.33 m
SIDING 1	Detection	1.08 m
SIDING 2	Detection	1 m
SIDINGS	Detection	1.13 m
Station Limits Left	Detection	1.63 m
Station Limits Right	Detection	1 m
TRACK 1	Detection	1.27 m
TRACK 2	Detection	1.02 m

At the bottom of the dialog box, there are three buttons: "Save...", "Print...", and "Close".

TIP: Copy and paste the list into your spreadsheet program for further processing.

1.15 Licensing

With the trial version, you can freely use AnyRail for small layouts of up to 50 elements.

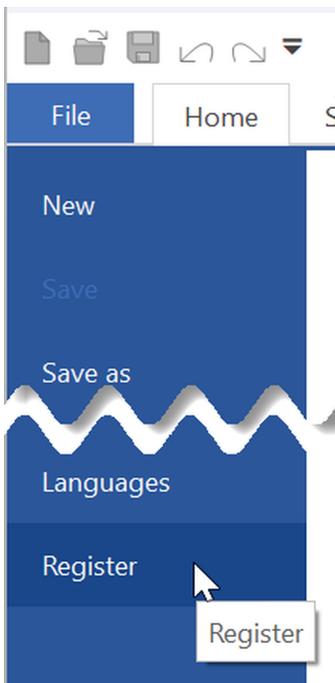
If you want to go beyond that, you need to buy a license key that unlocks the software and lifts this restriction.

To register, first buy a license on our [website](#).

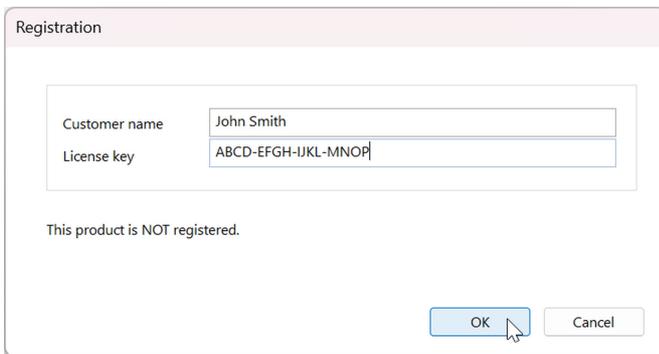
You will immediately receive an email stating your registered user name and license key.

To register AnyRail

1. Open the **File** tab, and click **Register**.



2. Copy and paste the necessary information from your registration email.



NOTE: Make sure to enter both your registered name and the key exactly as these are stated in your license details. Both need to match - including uppercase and lowercase letters and interpunction - for the license to work.

3. Click **OK**.

NOTE: You may use your license on multiple computers, as long as you are the one using the software yourself. The license may not be shared with others.

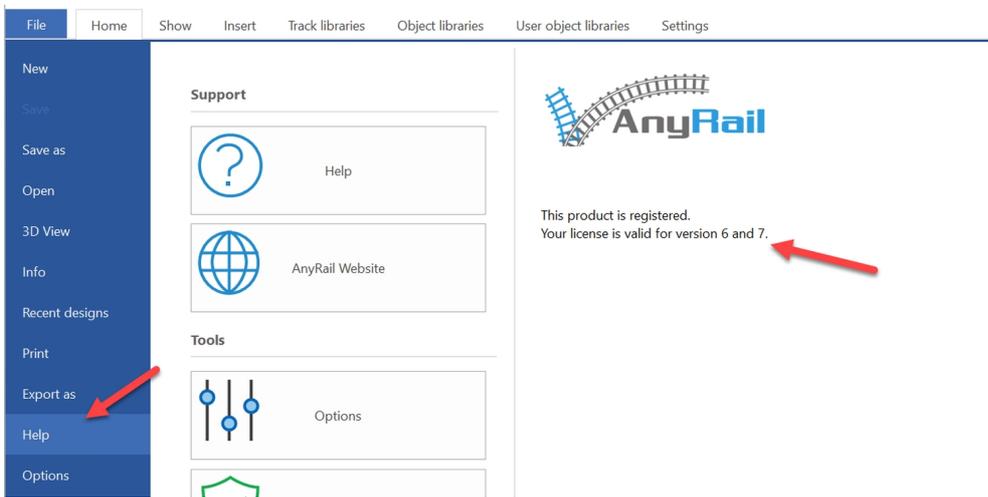
1.15.1 Updates and upgrades

Whether or not you have a license for AnyRail, you can always update your installation for free. *Updates* can be recognized by a difference in the minor version number, e.g. 7.15.0 to 7.19.0, or in the patch number, e.g. 7.15.0 to 7.15.1.

Upgrades can be recognized by a difference in the major version number, e.g. 7.27.0 to 8.1.0. Whether upgrades are free depends on your current license.

To check the current license

- Open the **File** tab, and select **Help**.

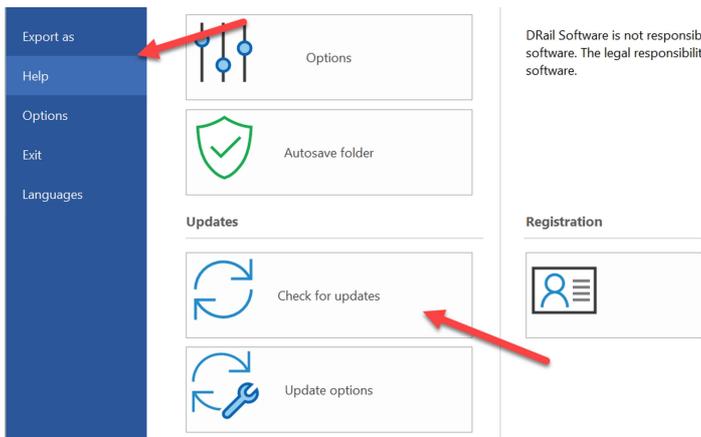


AnyRail indicates for which major versions your license is valid.

INFO: Of course, AnyRail will never overwrite an existing licensed version. If you install a newer version for which you do not have a license, the new version will be installed next to the old version.

To check for updates and upgrades

1. Open the **File** tab, and select **Help**.
2. Click **Check for updates** to find out if your version is current.



AnyRail automatically contacts us to see if a newer version is available. If so, it will ask you whether you want to update.

Update options

Depending on your settings, AnyRail regularly checks for updates automatically.

To view or change the update options

1. Open the **File** tab, and select **Help**.
2. Click **Update options**.

2 Reference Guide

This part of the user manual lists each AnyRail feature and function.

TIP: If you're new to AnyRail, please read Getting Started first.

2.1 Features

This chapter lists those AnyRail features that need some extra explanation.

2.1.1 Glue

You can *glue* certain elements, such as track and predefined elements, so that you can't accidentally move them.

To glue track

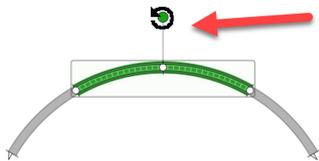
- Right-click the element, and select **Glue**.

2.1.2 Rotate

Any element or selection of elements can be rotated.

Method 1

1. Select the elements. A selection box with a handle appears.

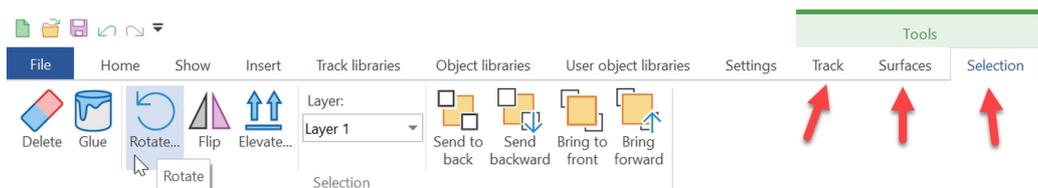


2. Use the handle to rotate the selection with the mouse.

NOTE: If the handle is red, the selection cannot be rotated. Usually this is caused by glued items.

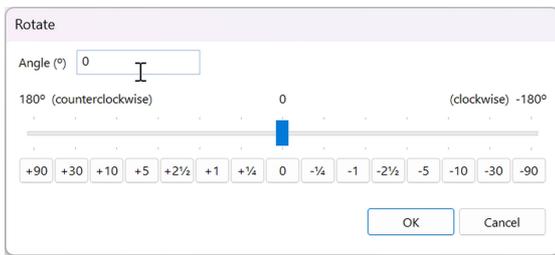
Method 2

1. Select the elements. Depending on what you select, various extra tabs appear on the ribbon:



2. Click **Rotate...**

A new window appears:



3. Enter an angle or use the slider. Your selection rotates as you change the angle. You can also use the buttons to rotate a certain number of degrees. The 0 button resets the rotation to the start position.
4. Click OK.

NOTE: Using the slider will change the angle in full degrees. However, the angle may be changed an arbitrary amount by entering a value in the edit box, i.e. 23.7.

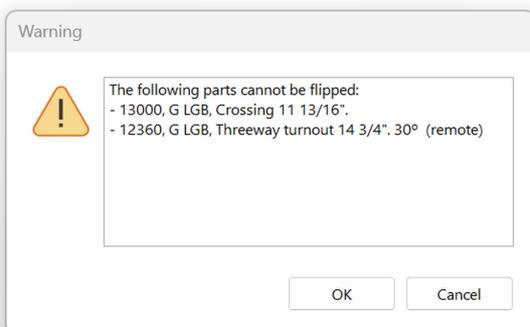
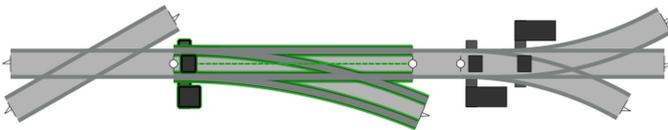
2.1.3 Flip

Some elements can be *flipped* (i.e. turned into a mirror image of themselves). You can use this feature to invert your complete layout if you wish. AnyRail will automatically replace each element with its mirrored counterpart. AnyRail shows a list of elements that cannot be mirrored.

To flip an element or a selection of elements

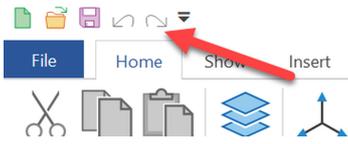
1. Select the elements to flip. For track, all connected track is flipped automatically when a subselection of it is flipped.
2. In the ribbon, select Flip.

The elements are mirrored. If the action cannot be completed, a list of problem elements is displayed. These elements don't have a mirrored counterpart.



2.2 The Quick Access Toolbar (QAT)

The *Quick Access Toolbar* is the list with small icons at the top left of the window.



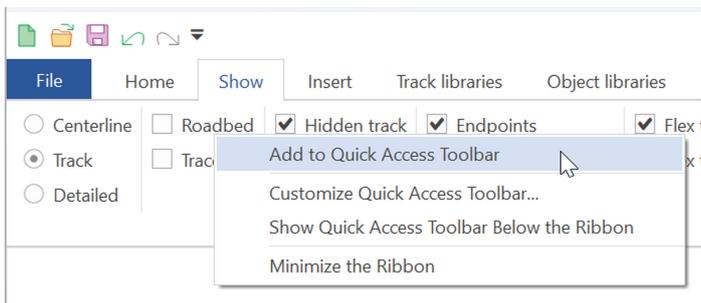
Don't worry if you can't remember the small icons! If you hover over them you'll see a tooltip.

To change to Quick Access Toolbar

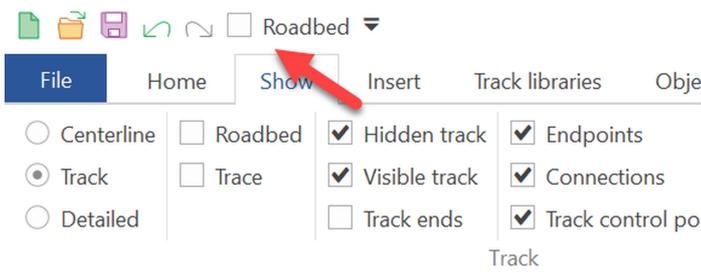
1. Right-click the function you want to add to the Quick Access Toolbar.
2. Select **Add to Quick Access Toolbar**.

Example

- Open the **Show** tab, right-click **Roadbed** and select **Add to Quick Access Toolbar**.



The function is added.



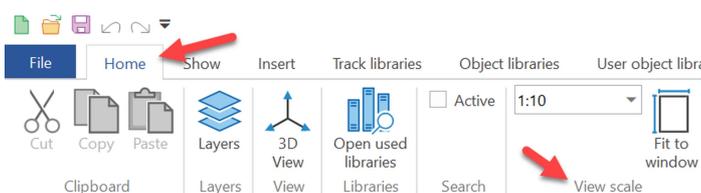
TIP: To reset AnyRail to its original settings, shut it down and start it again while holding *SHIFT* down.

2.3 The ribbon

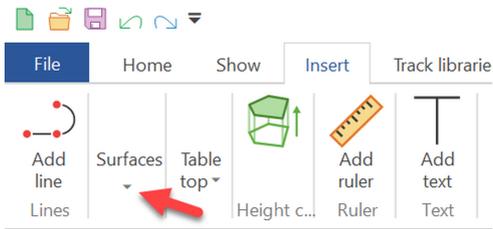
All functions available in AnyRail can be accessed through the *ribbon*.

The ribbon is the part at the top of the window where the functions are displayed.

The ribbon is organized into *tabs*. A tab is organized into *groups*.



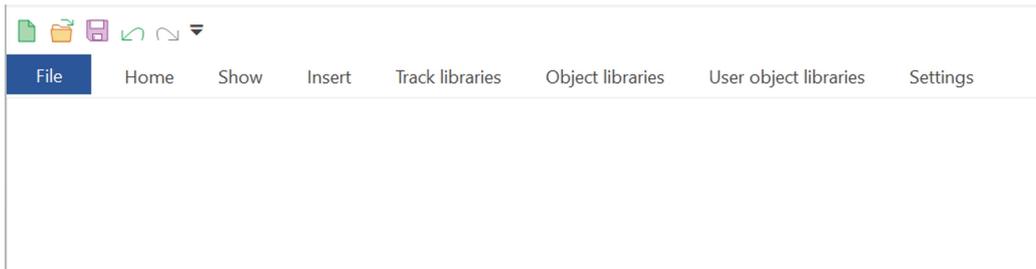
When you resize the AnyRail window, the ribbon resizes as well. Groups might collapse.



To open a collapsed group, simply click the little arrow on it.

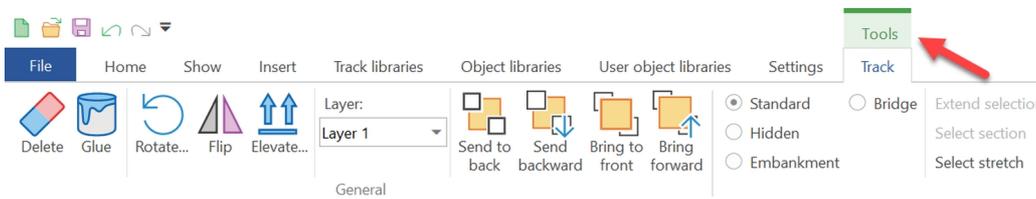
Sometimes, the ribbon takes too much space. To fold it, double-click one of its tabs (not the **File** tab).

Double-click a tab again to unfold it.



Tabs

Not all tabs are visible at all times. The tabs to work on track, lines, rulers, etc. only appear when you have selected these elements and are highlighted in green.



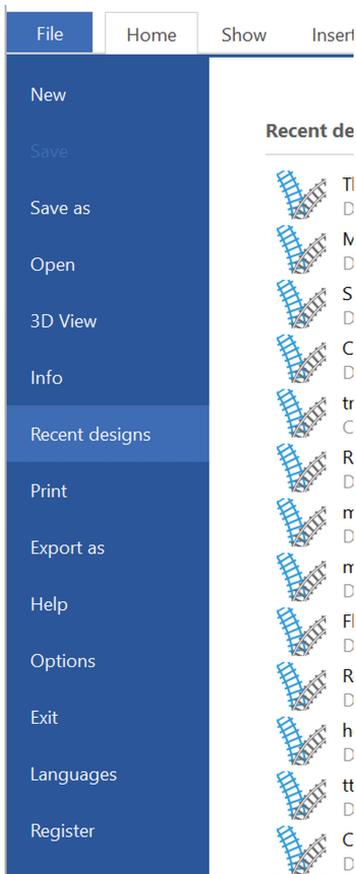
2.4 Ribbon Tab reference

In the following, each function on each tab is listed and explained.

2.4.1 File tab, 2D view

This in fact is not a real tab. It is the backstage button.

Click it to open.



Function

Description

New

Start a new layout

Save

Save the layout

Save As

Save the layout by a new name

Open

Open an existing layout from disk

3D View

Switch to a 3D view

Info

Info on your current design

Recent designs

The files you have opened most recently

Print

Print the layout or change print settings

Export as

Export the layout in various formats

Help

Help, updates, and registration

Options

Program options

Exit

Quit the program

Languages

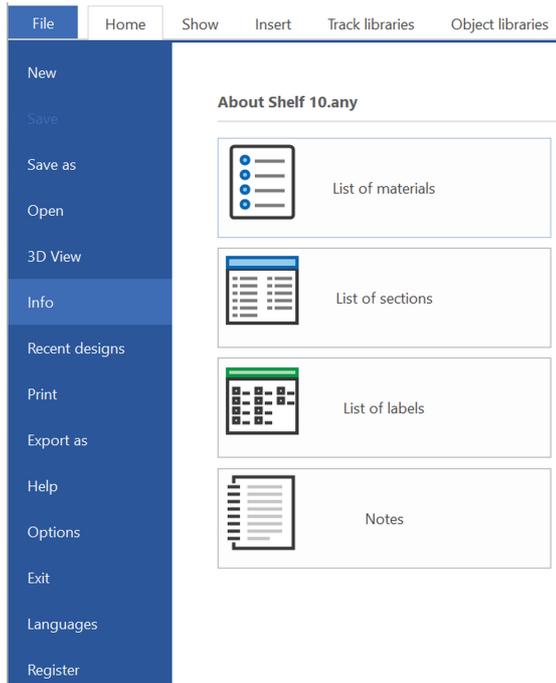
Change to another language

Register

Register the software with your license key. Only available when you've not already registered

Info

Click **Info** to find these options.



Function

Description

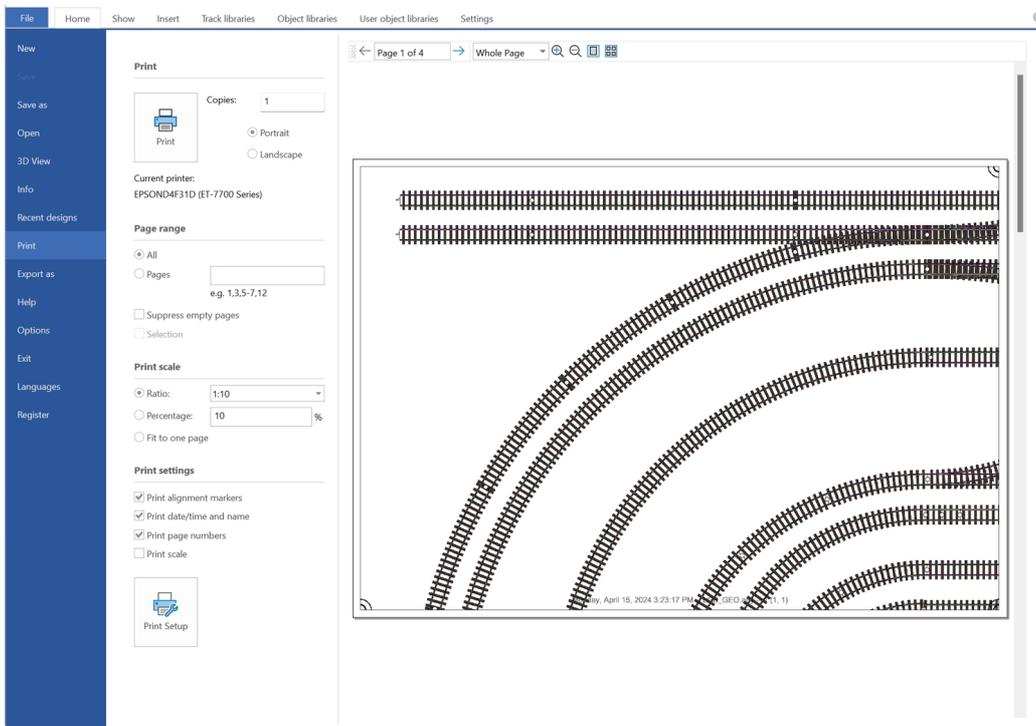
List of materials	The list of all elements used in your track plan
List of sections	The list of sections you defined for your track plan
List of labels	The list of labels you gave to items, such as turnouts
Notes	Your notes for this plan

Recent designs

Click **Recent designs** to see the files you recently used.

Print

Click **Print** to find these options.



Function

Description

Print

Print the plan

Copies

The number of copies to print

Portrait/Landscape

The paper orientation

Suppress empty pages

Do not print pages with nothing on it

Selection

Print only what is selected in the plan

Print scale

Set the print scale in various ways

Print alignment markers

Print markers on the page corners to make it easier to align them

Print date/time and name

Print this info on each page

Print page numbers

Print a page number on each page

Print scale

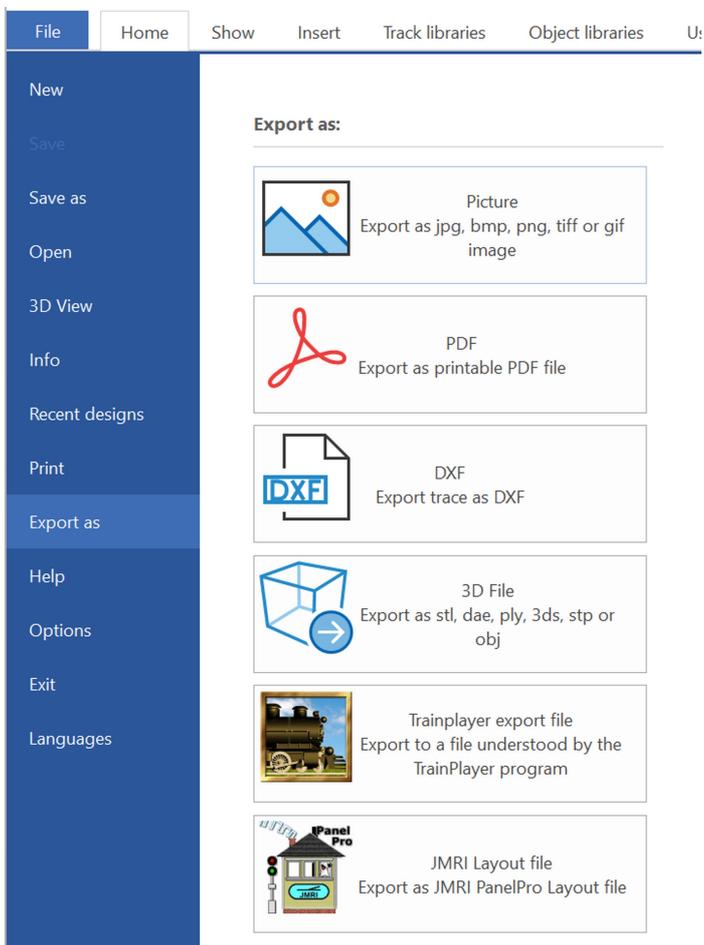
Print the scale on each page

Print Setup

Setup printer, paper size, etc.

Export as

Click the **Export As** button to find these options.



Function

Description

Picture

Create a picture of your plan

PDF

Create a PDF file

DXF

Create a 2D export of the trace, that you could use for a laser cutter

3D File

Create a 3D file that can be imported in most 3D viewers

Trainplayer export file

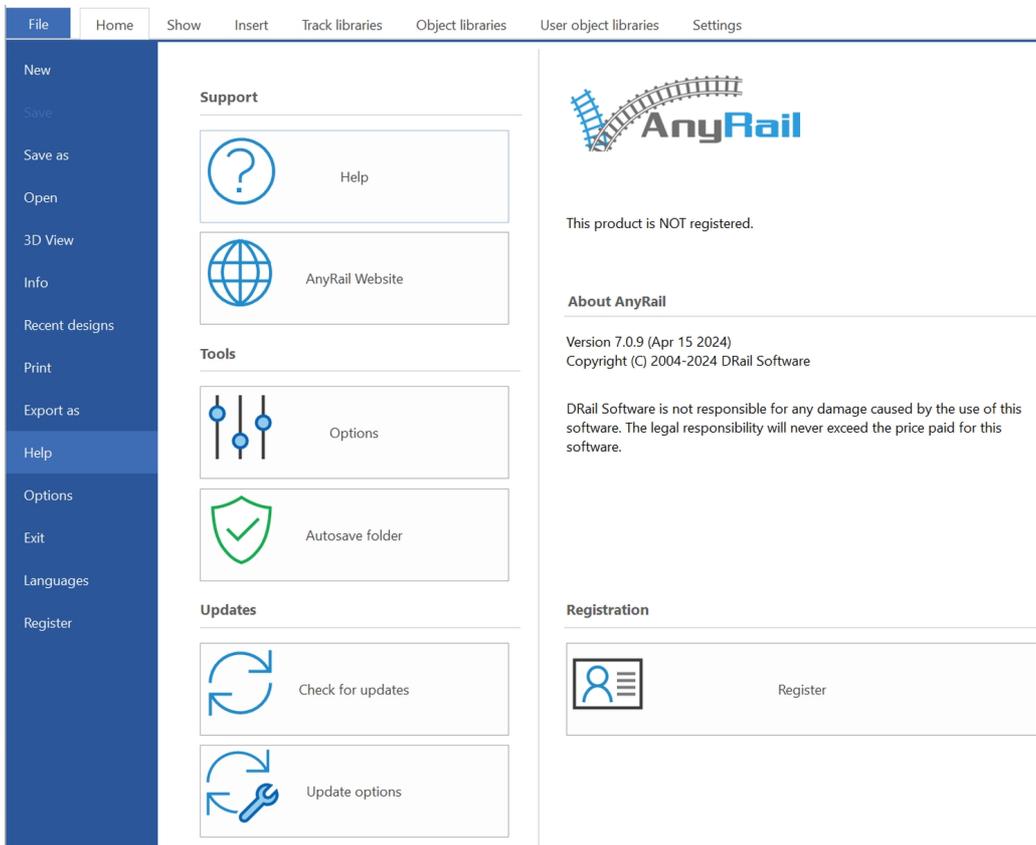
Create a file that can be interpreted by Trainplayer. Trainplayer is a program to simulate running trains that can be found here: [Trainplayer](#)

JMRI Layout file

Creates a file that can be opened in JMRI PanelPro. More info is here: [JMRI](#)

Help

Click the **Help** button to find these options.

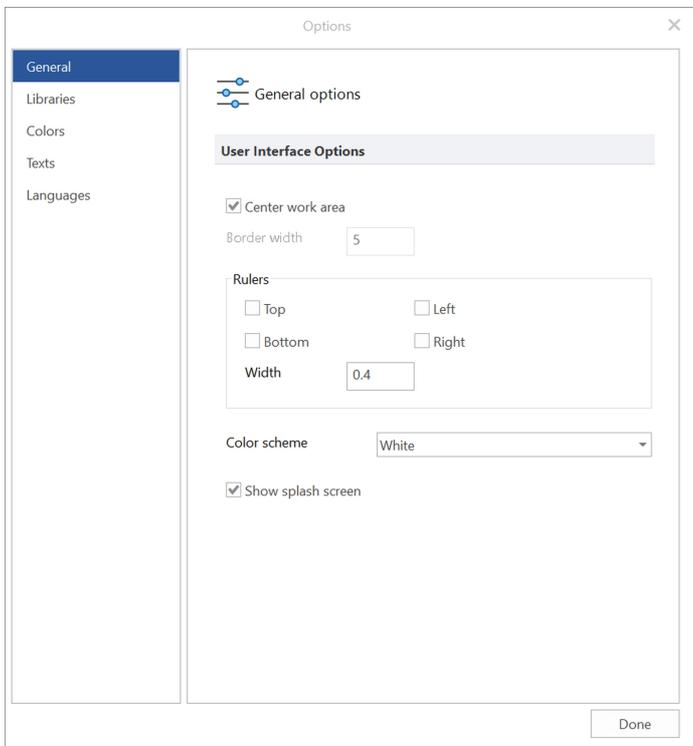


<i>Function</i>	<i>Description</i>
Help	Open this documentation
AnyRail Website	Go to the AnyRail website
Options	Open the options dialog
Autosave folder	Open the folder with the automatically saved files. Use this function in case AnyRail stopped or was stopped in an unexpected way, and you want to recover the layout you were working on
Check for updates	Contact the AnyRail server and see if there are any updates
Update options	Set the automatic update function
Register	Register the software with a license key

Options

This button opens a new window where you can set additional options.

General options



Function

Description

Center work area

Uncheck to draw the work area in the left upper corner of the screen. Check to center the work area

Border width

The border width when not having a centered work area

Rulers

Side rulers

Width

Side rulers width

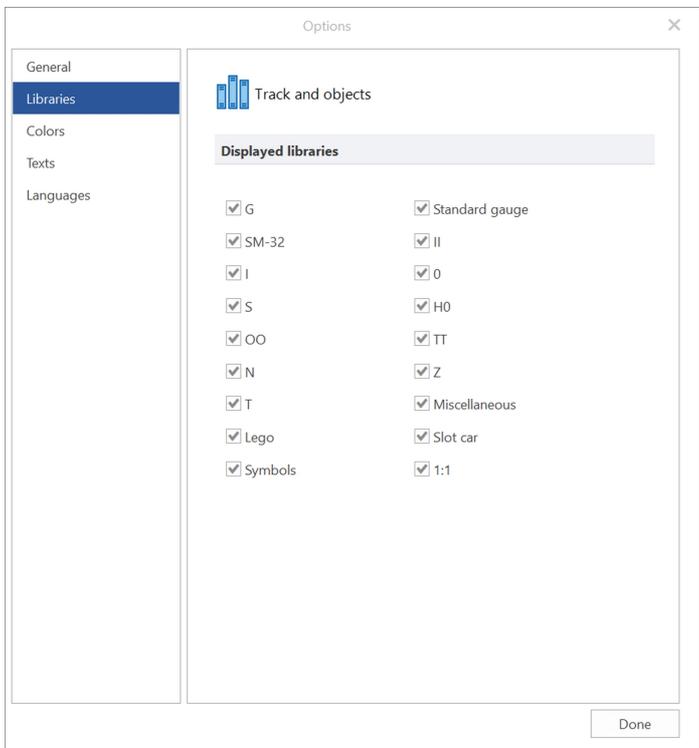
Color scheme

Overall color scheme

Show splash screen

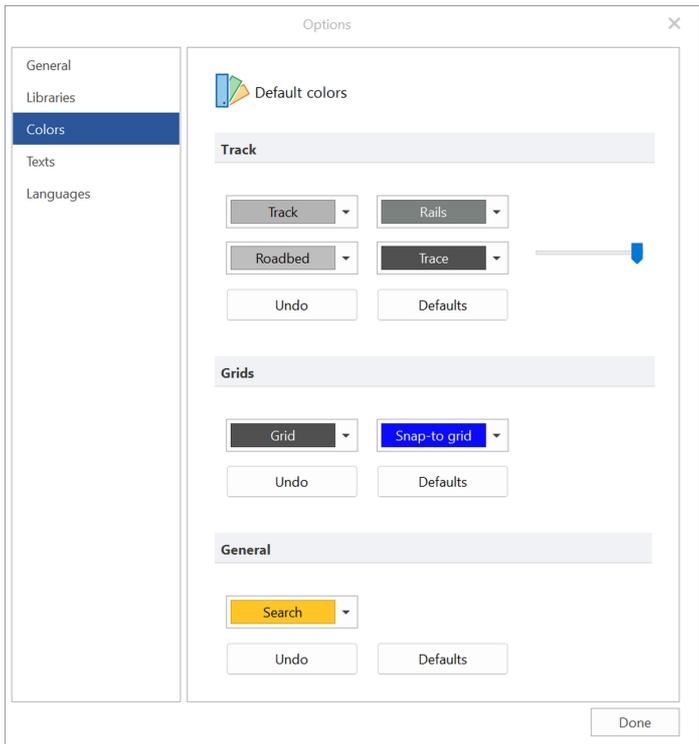
Show the logo while starting the program

Libraries



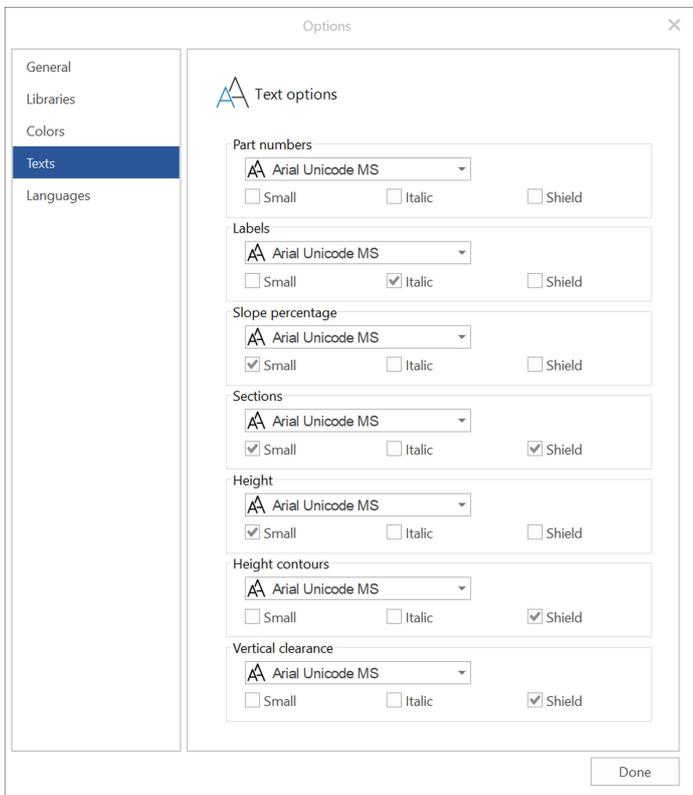
Select the scales for which you want to use the track and object libraries.

Colors



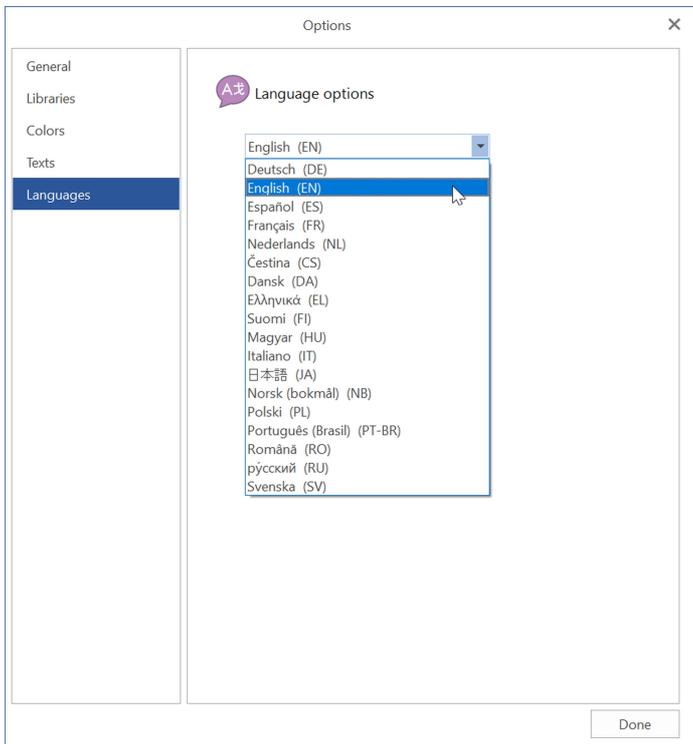
Set the default colors for the various types of items. The slider is to change the transparency.

Texts



Set the text properties per category.

Languages

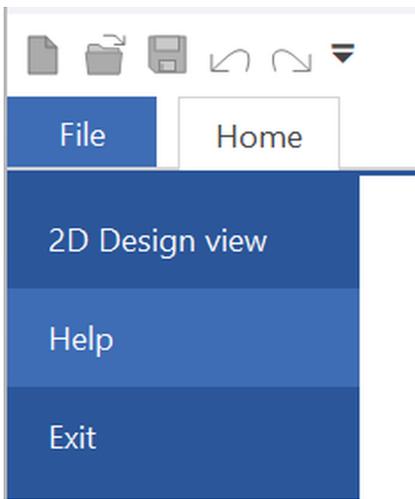


Select your preferred language from the drop down box.

2.4.2 File tab, 3D view

This in fact is not a real tab. It is the backstage button.

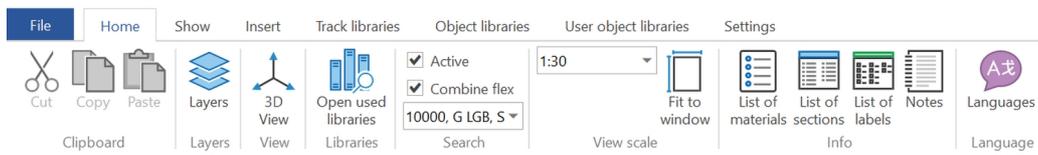
Click it to open.



<i>Function</i>	<i>Description</i>
2D View	Switch to the 2D design view
Help	Help, updates, and registration
Exit	Quit the program

2.4.3 Home tab, 2D view

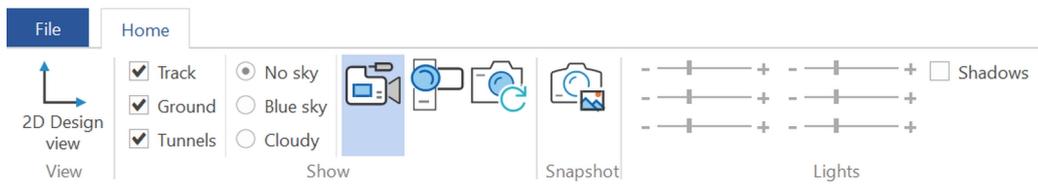
The **Home** tab contains functions you probably use most often.



<i>Function</i>	<i>Description</i>
Cut	Remove whatever's selected, and keep it in the Paste buffer. Shortcut is <i>Ctrl-X</i>
Copy	Keep a copy of whatever's selected in the Paste buffer. Shortcut is <i>Ctrl-C</i>
Paste	Paste whatever's in the Paste buffer. Shortcut is <i>Ctrl-V</i>
Layers	Open the layers pane
3D View	Open the 3D view. This may take a few seconds for larger layouts
Open used libraries	Open the libraries that are used by the current plan
Active	Activate Search. Select from the drop down box to highlight the items in the plan
Combine flex	Highlight all flexes with the same part number
View scale	Set the display scale
Fit to window	Find the largest scale such that the work area fits the window
List of materials	Show a bill of materials
List of sections	Show a list of all the isolated sections
List of labels	Show a list of all the part labels
Notes	Writing pad for your notes
Languages	Change the program's language

2.4.4 Home tab, 3D view

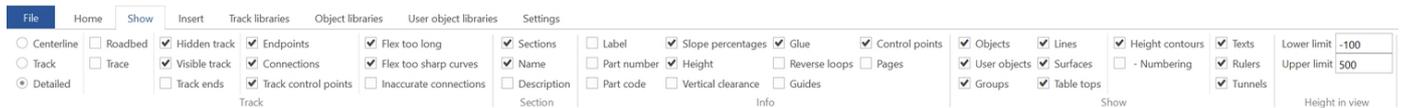
The **Home** tab contains functions you probably use most often.



<i>Function</i>	<i>Description</i>
2D View	Open the 2D design view
Track	Show the track
Ground	Show the ground
Tunnels	Show the tunnels
No sky/Blue sky/Cloudy	Select a background
	Use the standard camera
	Use the FPS camera
	Return the camera to its start position
Snapshot	Make a snapshot
Lights	Set the brightness for each light. There is a light on each of the four corners, a top light and an ambient light
Shadows	Display shadows

2.4.5 Show tab

The **Show** tab contains functions to control what's currently displayed.



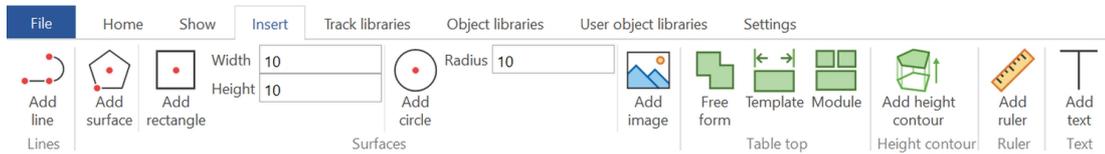
<i>Function</i>	<i>Description</i>
Centerline	Show only a single line for the track
Track	Show the track. The outer lines of what's drawn are the actual rails
Detailed	Draw track with details. The sleepers have the actual width, but not the actual position and distance from each other
Roadbed	Show the roadbed of the track. The actual width of the sectional elements is used here. Make sure to tick this box if you want to check if the track fits on the baseboard, and does not overlap
Trace	Show a trace of the given Width under all track. This can be used to check clearances
Width	Width of the trace
Hidden track	Show all track labeled Hidden. This is dotted track in tunnels, hidden staging yards, etc.
Visible track	Show all track not labeled Hidden. This is all track in plain sight

Functions	Description
Track ends	Show boundaries between the sectional track elements
Endpoints	Show element endpoints
Connections	Show connections between elements
Track control points	Show flex track control points
Flex too long	When checked, overstretched flex appears red
Flex too sharp curves	When checked, too-tightly curved flex tracks appear red, orange and yellow
Inaccurate connections	Mark connections that don't fit perfectly with a red dot
Sections	Show sections
Name	Show the name of the section. This only shows when there's enough room. The software determines a position and orientation for the text
Description	Show the description of the section. This shows only when there's enough room
Label	Show the label for each part
Part number	Show a part number on each track element. The software tries to scale the font down on smaller parts. If this is not possible, the track number won't show
Part code	Show a part code on each track element, if available. The software tries to scale the font down on smaller parts. If this is not possible, the track code won't show
Slope percentages	This shows the percentage of the gradient (if any). 1% means one unit of descent/ascent per 100 units of distance, e.g. 1 cm per meter. When the slope is too steep, this percentage will be shown in red. See Settings to set the maximum slope
Height	Show the heights
Vertical clearance	Show the distance between the lower and upper track where tracks cross. Please note that this is the top-rail to top-rail distance
Glue	Show glue indicators
Reverse loops	Show reverse loops. Only shows the shortest loops in case of multiple overlapping loops
Guides	Show circle center point for curved track
Control points	Show line and surface control points
Pages	Show the pages as the layout would be printed in the current print scale
Objects	Show predefined objects
User objects	Show user objects

<i>Function Groups</i>	<i>Description</i>
Show groups	Show groups
Lines	Show lines
Surfaces	Show surfaces
Table tops	Show table tops
Height contours	Show height contours
-	
Numbering	Numbering of the height contours
Texts	Show texts
Rulers	Show rulers
Tunnels	Show tunnels
Lower limit	Only show all elements with a height of at least this value. Together with the Upper limit , this allows you to define a horizontal slice of your layout
Upper limit	Only show all elements with a height below this value

2.4.6 Insert tab

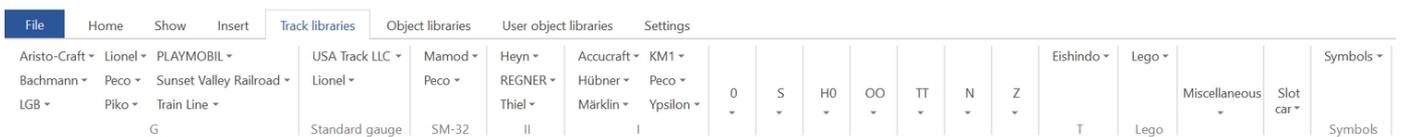
On the **Insert** tab are elements that can be added to the layout.



<i>Function</i>	<i>Description</i>
Add line	Add a line. You can use wider lines to draw streets or rivers
Add surface	Add a surface. This function can be used to draw shapes, the train table, or even your garden
Add rectangle	Add a rectangle with the given measurements
Width	Width of the rectangle to add
Height	Height of the rectangle to add
Add circle	Add a circle with the given radius
Radius	Radius of the circle to add
Add image	Add an image
Free form	Add a free form table top
Template	Add a table top from a template
Module	Add a module table top
Add height contour	Add a height contour for landscaping
Add ruler	Add a ruler. The length and style can be set afterwards
Add text	Add text. The font and size can be set afterwards

2.4.7 Track libraries tab

On the **Track libraries** tab you can find all supported track libraries.



Note that the libraries are sorted by scale or gauge.

Click on the little down arrow to open a folded group (e.g. H0 in the picture).

Click a manufacturer's name to get a list of the track systems we support.

TIP: Most people only use one gauge. To hide all gauges you are not going to use, go to the Options.

2.4.8 Object libraries tab

On the **Object libraries** tab you can find all the predefined objects, such as signals, trees, and structures.



The icon indicates the sort of objects that you'll find.

Click the small arrow to open the list of supported libraries.

TIP: Most people only use one gauge. To hide all gauges you are not going to use, go to the Options.

2.4.9 User object libraries tab

On the User object libraries tab you can manage your user objects.

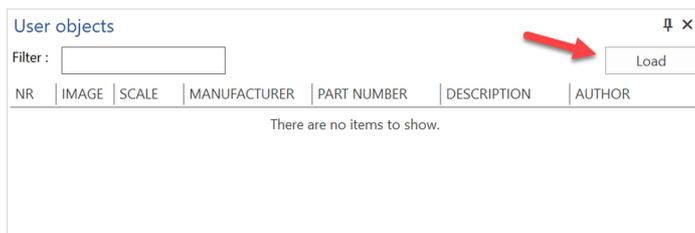


The items are ordered per scale, per manufacturer in alphabetical order.

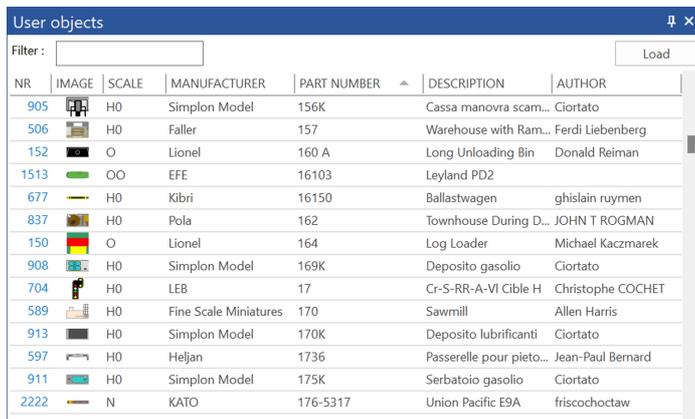
Click **Download new items** to download items that others have shared.

Viewer

1. Click **Viewer** to view all the items:



2. Click the **Load** button to populate the viewer.



3. Use the **Filter** to find items.

User objects

Filter : town | Load

NR	IMAGE	SCALE	MANUFACTURER	PART NUMBER	DESCRIPTION	AUTHOR
	H0		Pola	162	Townhouse During D...	JOHN T ROGMAN
2050		N	Faller	232170	Old town wall set	Ambro 54
2086		N	Faller	232170	Old town wall set	Ambro 54
2093		N	Faller	232171	Old town tower with ...	Ambro 54
1999		N	Faller	232175	Old-Town house wit...	Ambro 54
2003		N	Faller	232176	Old-Town houses wit...	Ambro 54
2065		N	Faller	232177	Town house with arc...	Ambro 54
1980		N	Faller	232266	Row of town houses	Ambro 54
2113		N	Faller	232303	Townhall	Ambro 54
1958		N	Faller	232307	2 Town houses (2)	Ambro 54
1974		N	Faller	232307	2 Town houses (1)	Ambro 54
1938		N	Faller	232311	Town House (1)	Hans Schaefer
1956		N	Faller	232311	Town House (2)	Hans Schaefer
1983		N	Faller	232311	2 Town houses (1)	Ambro 54

2.4.10 Settings tab

Use the **Settings** tab to change the overall settings of the software.

AnyRail remembers settings between sessions, but also saves them with each layout.

File Home Show Insert Track libraries Object libraries User object libraries **Settings**

Measurement system * Units

Decimals: 2

Length 500

Width 500

Work area

Grid

Size 50

Background

Sizes

Endpoint 1.5

Connection 1.5

Control point 2

Flex

Minimum radius 1 36

Minimum radius 2 0

Minimum radius 3

Tolerances

Distance 0.3

Angle (°) 3

Slopes

Maximum % 3

Min. vertical clearance 0

Behavior

Autoconnect

Distance 1.2

Snap to grid

Size 1

Allow mixed rails

<i>Function</i>	<i>Description</i>
Measurement system	Choose from cm, mm, inches with fractions or decimals
Decimals	Set the display accuracy of all values
Length	The length of the work area on screen. Make it somewhat larger than your train table
Width	The width of the work area on screen. Make it somewhat larger than your train table
Grid	Show a grid with a Size , possibly in the Background
Endpoint	The drawing size of an endpoint. An endpoint is the outer end of a piece of track
Connection	The drawing size of a connection. The connection is the circle denoting that two pieces of track are connected
Control point	The drawing size of the control points. These are the points to manipulate flex track and lines
Minimum radius 1	Radius 1 used for determining when Flex too sharp curves triggers, indicated by a red centerline
Minimum radius 2	Radius 2, 0 (inactive) or larger than radius 1, indicated by an orange centerline
Minimum radius 3	Radius 3, 0 (inactive) or larger than radius 2, indicated by a yellow centerline
Distance	The maximum distance allowed between connecting endpoints
Angle	The maximum angle allowed between connecting endpoints
Maximum %	The maximum percentage allowed on slopes
Min. vertical clearance	The minimum vertical distance allowed for track crossings
Autoconnect	Automatically connect track when endpoints are close enough
Distance	The minimum distance to make Autoconnect trigger
Allow mixed rails	When checked, any track with the same gauge will connect. Uncheck to make sure you use the correct transition track
Snap to grid	Makes lines and surfaces snap to an underlying grid with Size . The left upper point of the line or surface is aligned with the grid

2.5 Context sensitive tabs and popup menus

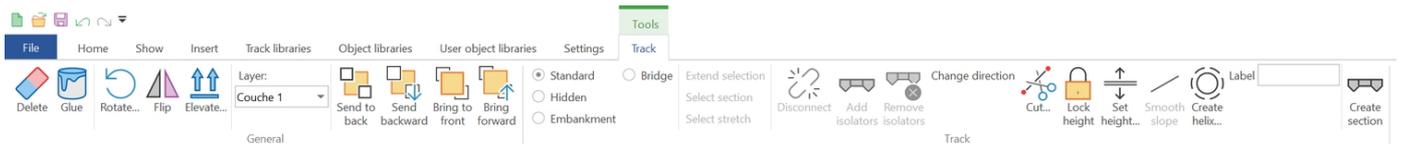
Some tabs only display in specific cases, depending on what you've currently selected on screen.

These tabs have a green glow.

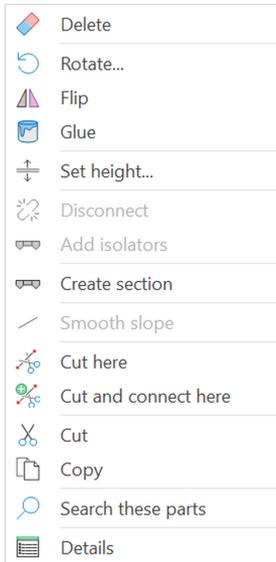
When you right-click an object, a popup menu comes up, giving you fast access to the most frequently used features.

2.5.1 Track tab and menu

The Track tab appears when track is selected.



The track popup menu appears when you right-click the track.



<i>Function</i>	<i>Description</i>
Delete	Delete the selected track
Glue	Glue the selected track to prevent accidentally moving it
Rotate...	Rotate the selected track and all connected track with it
Flip	Mirror all selected track with all connected track
Elevate...	Increase or decrease the height of the selected track
Layer	Move selected track to another layer
Send to back	Send this track to the back of all elements with the same height
Send backward	Send this track one step back relative to all elements with the same height
Bring to front	Bring this track on top of all the elements with the same height
Bring forward	Bring this track one step further to the top relative to all elements with the same height
Standard	The track is displayed as-is, both in 2D and 3D
Hidden	The track is displayed as a dotted line in 2D. In 3D, it will be hidden, and a tunnel is created if necessary
Embankment	In 2D, small lines indicate that the track is on an embankment. In 3D, the ground is shaped as an embankment
Bridge	In 2D, trellis is drawn over the bridge. In 3D, the track is put on pillars

<i>Function</i>	<i>Description</i>
Enlarge selection	Enlarge the selection in a logical way. Double click on the track has the same result
Select section	Only when sections are used: select the complete section
Select stretch	Select all connected track
Disconnect	Disconnect the selected track
Add isolators	Insert isolators at the outer ends of the current selection
Remove isolators	Remove all isolators in the current selection
Change direction	For single track only: add an arrow to indicate one way track
Cut...	Cut the track in two. Only for simple curves and straights
Cut here	Cut the track at the mouse position
Cut and connect here	Cut and connect the track at the mouse position
Lock height	Lock the heights for the endpoints of the track
Set height...	Set the height of the selected track
Smooth slope	Create a slope for the selected track
Create helix...	Create a helix from the currently selected, unconnected curve
Label	Set a label for the selected track element
Create section	Turn the selection, or isolated track, into a section
Search this part	Highlight all the same parts in the plan
Details	Show details and positions of the selected track

Section functions

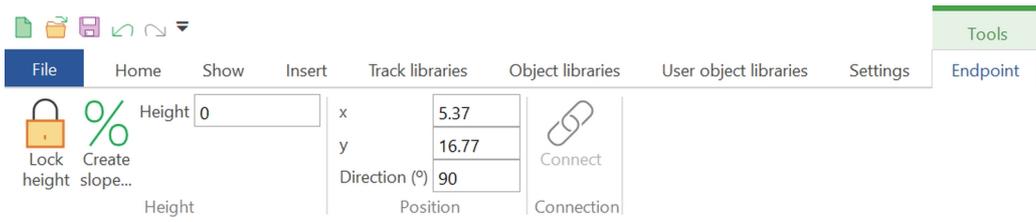
Whenever a section is defined for the selected track, the tab has a few additional functions.



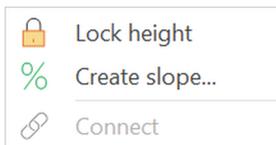
<i>Function</i>	<i>Description</i>
Remove sections	Remove the section definitions. The track itself is not removed
Name	Enter a name for the section here
Description	Select or enter a description here
Color	Select a color for the section

2.5.2 Endpoint tab and menu

Clicking on an endpoint (the small line and triangle at the end of the track) reveals the Endpoint tab.



The endpoint popup menu appears when you right-click an endpoint.



Function

Description

Lock height

Lock the height so it cannot be changed by accident. Be careful using this function and make sure that you check the heights surrounding it to confirm the slopes are all OK

Create slope...

Create a slope with a certain percentage

Height

The height of this point

x

The x coordinate of this point

y

The y coordinate of this point

Direction(°)

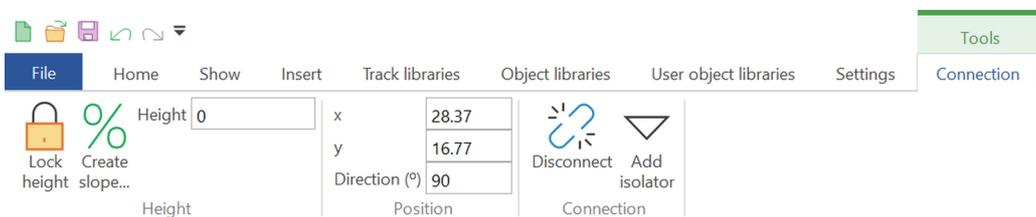
The direction of the endpoint

Connect

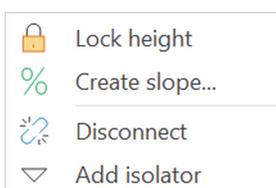
Connect this endpoint to a nearby other endpoint

2.5.3 Connection tab and menu

Clicking on a connection (the small circle between two pieces of track) reveals the Connection tab.



The connection popup menu appears when you right-click a connection.



Function	Description
Lock height	Lock the height so it cannot be changed by accident. Be careful using this function and make sure that you check the heights surrounding it to confirm the slopes are all OK
Create slope...	Create a slope with a certain percentage
Height	The height of the connection
x	The x coordinate of the connection
y	The y coordinate of the connection
Direction (°)	The direction of the connection
Disconnect	Remove the connection and disconnect the track
Add/Remove isolator	Adds or removes the isolator between the two pieces of track. Use this to create sections

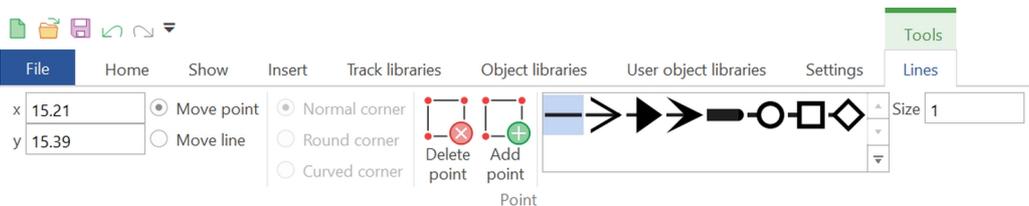
2.5.4 Lines tab and menu

The Lines tab is only available when a line or one of its points is selected.

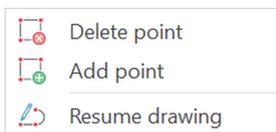
The popup menu is available when you right-click a point or a line.

Point functions

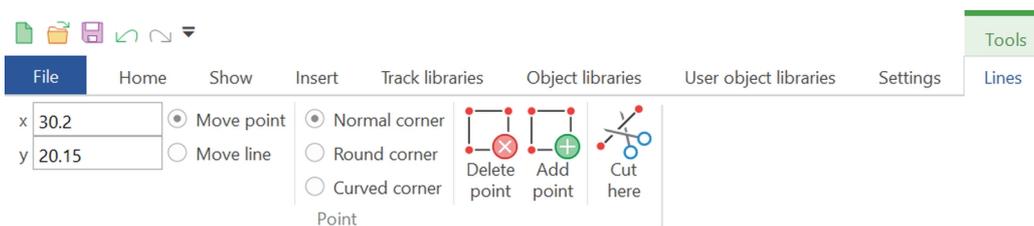
- Outer point tab



- Outer point popup menu



- Inner point tab



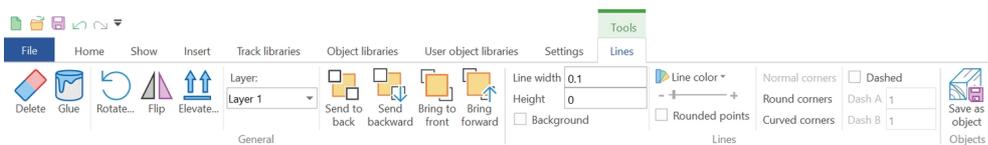
- Inner point popup menu

	Delete point
	Add point
	Cut here

<i>Function</i>	<i>Description</i>
x	The x coordinate of this point
y	The y coordinate of this point
Move point	Move only this point
Move line	Move the whole line
Normal corner	The corner defined by the neighboring points
Round corner	A perfect arc
Curved corner	An elliptic corner
Delete point	Delete the current point
Add point	Add a point close to the current point
End styles	Select an end style
Size	End style size
Resume drawing	Continue to draw a line from here
Cut here	Cut the line in two

Line functions

- Tab



- Popup menu

	Delete
	Rotate...
	Flip
	Glue
	Add point
	Cut here
	Group
	Ungroup
	Save as object
	Cut
	Copy

<i>Function</i>	<i>Description</i>
Delete	Delete the line
Glue	Glue the line to avoid moving it by accident
Rotate...	Rotate the line
Flip	Mirror the line
Elevate...	Increase or decrease the height
Layer	Select to move the lined to another layer
Send to back	Send this line to the back of all elements with the same height
Send backward	Send this line one step back relative to all elements with the same height
Bring to front	Bring this line on top of all the elements with the same height
Bring forward	Bring this line one step further to the top relative to all elements with the same height
Line width	Set the drawing width of the line
Height	Set the height of the line. A line has one height, it can not be tilted
Background	Put this line in the background
Line color	Set the drawing color of the line
Transparency	Slide to set the transparency of the line
Rounded points	Round the points (for larger line widths)
Normal corners	Set all corners to normal
Round corners	Set all corners to perfect arcs
Curved corners	Set all corners to elliptical curves
Dashed	Create a dashed line with dash lengths Dash A and Dash B
Save as object	Create a user object from the selected lines
Add point	Add point at cursor

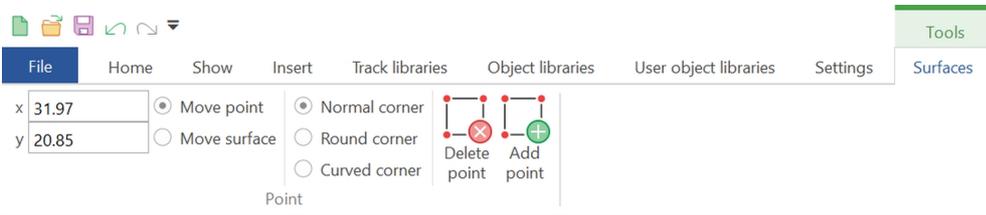
2.5.5 Surfaces tab and menu

The Surfaces tab is only available when a surface, or one of its points is selected.

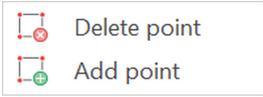
The popup menu is available when you right-click a point or a surface.

Point functions

- Tab



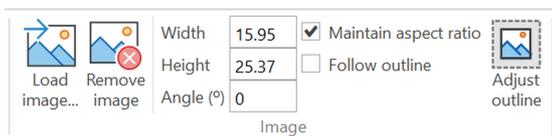
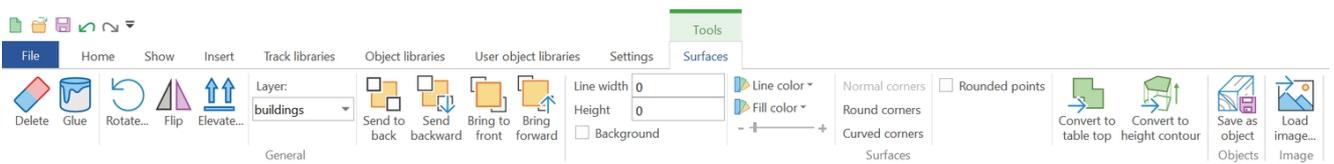
- Popup menu



Function	Description
x	The x coordinate of this point
y	The y coordinate of this point
Move point	Move only this point
Move surface	Move the whole surface
Normal corner	The corner defined by the neighboring points
Round corner	A perfect arc
Curved corner	An elliptic corner
Delete point	Delete the current point
Add point	Add a point close to the current point

Surface functions

- Tab



- Popup menu

	Delete
	Rotate...
	Flip
	Glue
	Add point
	Group
	Ungroup
	Save as object
	Cut
	Copy

<i>Function</i>	<i>Description</i>
Delete	Delete the surface
Glue	Glue the surface to avoid moving it by accident
Rotate...	Rotate the surface
Flip	Mirror the surface
Elevate	Increase or decrease the height
Layer	Select to move the surface to another layer
Send to back	Send this surface to the back of all elements with the same height
Send backward	Send this surface one step back relative to all elements with the same height
Bring to front	Bring this surface on top of all the elements with the same height
Bring forward	Bring this surface one step further to the top relative to all elements with the same height
Line width	Set the drawing width of the outline
Height	Set the height of the surface. A surface has one height, it can not be tilted
Background	Put this surface in the background
Line color	Set the drawing color of the line
Fill color	Set the fill color of the surface
Transparency	Slide to set the transparency of the surface
Normal corners	Set all corners to normal
Round corners	Set all corners to perfect arcs
Curved corners	Set all corners to elliptical curves
Rounded points	Round the points (for larger outline widths)
Convert to table top	Convert the surface into a free form table top
Convert to height contour	Convert the surface into a height contour
Save as object	Create a user object from the selected surfaces
Load image	Load an image to fill the surface
Remove image	Remove the image that fills the surface
Width, Height, Angle	Set the size of the image (in your measurement units), and the orientation
Maintain aspect ratio	Keep the aspect ratio of the original image
Follow outline	Image follows resizing of surface. Surface should be rectangular
Adjust outline	Recalculates the surface outline so it fits the picture exactly

2.5.6 Rulers tab and menu

The Rulers tab appears when a ruler or one of its endpoints is selected.

Apart from simply dragging its endpoints, you can either click the ruler or one of its endpoints to manipulate it.

Ruler point

- Tab:

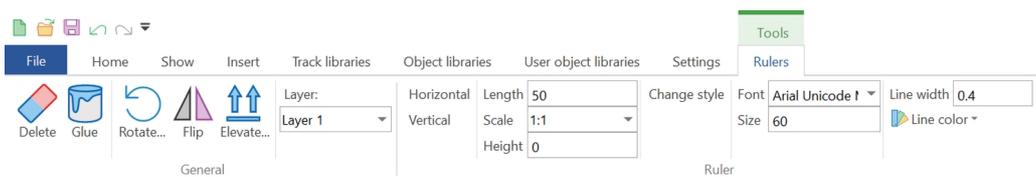


- The ruler point does not have a popup menu.

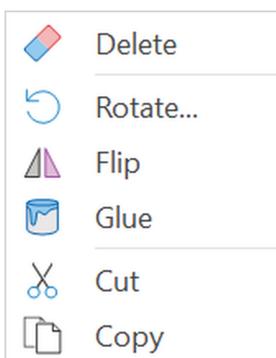
<i>Function</i>	<i>Description</i>
x	The <i>x</i> coordinate of this point
y	The <i>y</i> coordinate of this point
Move point	Move only this endpoint of the ruler
Move ruler	Move the whole ruler

Ruler

- Tab



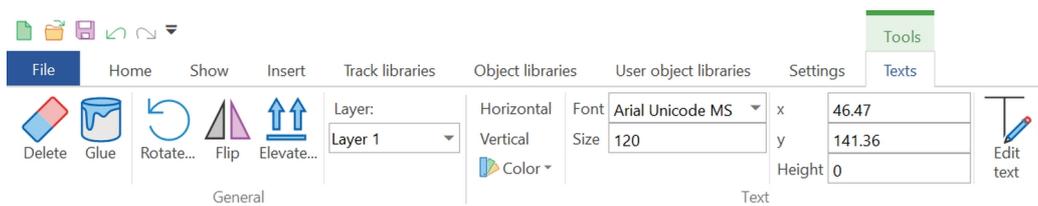
- Popup menu



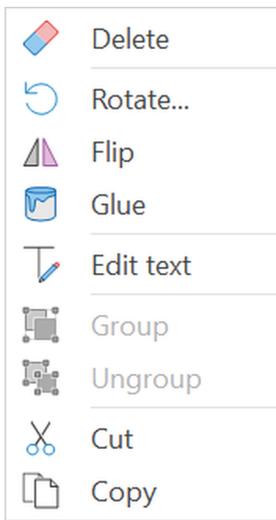
<i>Function</i>	<i>Description</i>
Delete	Delete the ruler
Glue	Glue the ruler to avoid accidentally moving it
Rotate...	Rotate the ruler
Flip	Mirror the ruler
Elevate	Increase or decrease the height
Layer	Move the ruler to another layer
Horizontal	Position the ruler horizontally. Click again to put it upside down
Vertical	Position the ruler vertically. Click again to put it the other way around
Length	Set the length of the ruler
Scale	The scale of the ruler. The displayed length is relative to the modeling scale
Height	Height of the ruler
Change style	Change the way the ruler looks
Font	Set the font of the ruler text
Size	Set the font size of the ruler text
Line width	Ruler line width
Line color	Color of the ruler

2.5.7 Texts tab and menu

The **Texts** tab appears only when text is selected.



The text popup menu appears when you right-click the text.

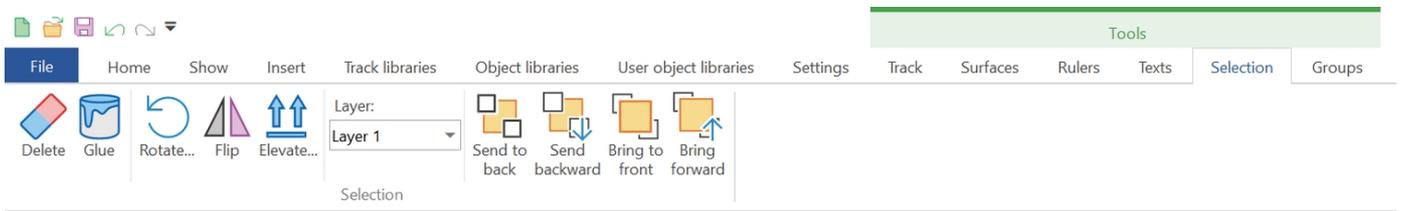


<i>Function</i>	<i>Description</i>
Delete	Delete selected text
Glue	Glue selected text to avoid accidentally moving it
Rotate	Rotate the selected text
Flip	Mirror the selected text
Elevate	Increase or decrease the height
Layer	Select a layer for the text
Horizontal	Position the text horizontally. Click twice to position the text upside down
Vertical	Position the text vertically. Click twice to position it the other way around
Color	Set a color for the selected text
Font	Select a font
Size	Select a font size
x	The x position of the text
y	The y position of the text
Height	Draw height of the text
Edit text	Click to edit the text. This can also be achieved by double clicking the text

TIP: Quickly start editing text by double-clicking it.

2.5.8 Selection tab

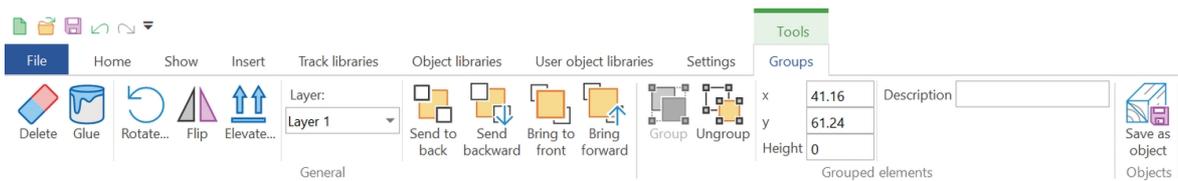
The **Selection** tab is only available when multiple items are selected.



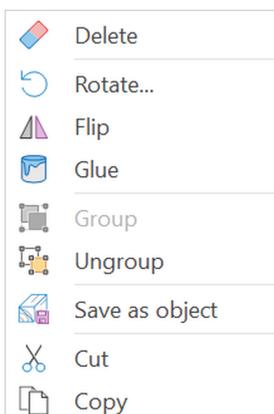
<i>Function</i>	<i>Description</i>
Delete	Delete the selected items
Glue	Glue the selected items to avoid moving it by accident
Rotate...	Rotate the selected items
Flip	Mirror the selected items
Elevate	Increase or decrease the height of everything in the selection
Layer	Select to move the selected items to another layer
Send to back	Send selected items to the back of all elements with the same height
Send backward	Send selected items one step back relative to all elements with the same height
Bring to front	Bring selected items on top of all the elements with the same height
Bring forward	Bring selected items one step further to the top relative to all elements with the same height

2.5.9 Groups tab and menu

The Groups tab is only available when multiple groupable items are selected, or a group.



The group popup menu appears when you right-click the group.



<i>Function</i>	<i>Description</i>
Delete	Delete the group
Glue	Glue the group to avoid moving it by accident
Rotate...	Rotate the group
Flip	Mirror the group
Elevate	Increase or decrease the height
Layer	Select to move the group to another layer
Send to back	Send this group to the back of all elements with the same height
Send backward	Send this group one step back relative to all elements with the same height
Bring to front	Bring this group on top of all the elements with the same height
Bring forward	Bring this group one step further to the top relative to all elements with the same height
Group	Group selected lines and groups (only available when applicable)
Ungroup	Ungroup this group (only available when applicable)
x	The left top x coordinate of the group
y	The left top y coordinate of the group
Height	Draw height of the group
Description	Description for the group (only available when applicable)
Save as object	Create a user object from the group