

PRODIM

PROLINER STAIRS APP USER MANUAL



Measure it all!

**Professional Dimensioning
for Production Improvement**

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Disclaimer

The influence of the operator on the measuring process is dominant, making him fully responsible for accuracy and safety. While using the Proliner he must ensure that no one is allowed near the cable or the control box while the pen is in use. Create a safe working environment before starting a measurement. Ensure the Proliner is positioned stable to prevent falling, never let go of the pen while measuring. Ensure no one is standing too close or walks through the measuring wire. A broken cable or dropped pen can cause rapid and unpredictable retraction of the cable which can severely injure anyone it might contact. Incorrect use might cause damage to the Proliner which is not covered under warranty, and could also cause damage to people or object, which is the user's responsibility.

We advise to make control measurements once in a while to ensure accuracy. The Proliner is a precision measuring machine. Let only by Prodim trained personnel work with the Proliner.

Recycling

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Content

The manual might discuss or show content that is not available for your acquired Proliner configuration. The content of this manual may change without notice. Any submission regarding the content of this manual can be sent to helpdesk@prodim-systems.com.

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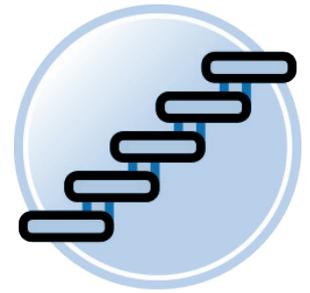
Prodim Proliner Stairs

1.	Proliner Stairs app	4
1.1	Summary Prodim Proliner Stairs app	4
1.2	Settings	5
1.3	Measure	5
2.	Edit and design	6
2.1	Editing	6
2.2	Identify	6
2.3	Fitting line	6
2.4	Measure	6
2.5	Model	7
2.6	Check	8
2.7	Finish	8
2.8	Report	8
2.9	General settings	9

1.1 Summary Prodim Proliner Stairs app

This summary will give some guidelines on how to use the Proliner Stairs app. This app contains a guided measurement sequence and all the tools to design and finish the project onsite. The Stairs app is designed like all other Proliner apps and contains the same menus and screens.

For general explanation please consult the Proliner 4.X manual.



Setting up

Pay attention to both the stability of the Proliner and the reach of the measuring wire. Make sure you are able to reach as many points as possible and the Proliner can't move while measuring.

1.2 Settings

Measurement settings

Contour

Set contour setting on 'open'.

Compensation

Compensation can be used in a same way as for other projects. It's up to the user to decide what compensation to use and therefore in what direction to measure.

Projection

Either choose first contour projection, first contour with Z or horizontal.

First contour: Measure at least three points on the finished floor and finish by pressing the number 3 button.

When no finished floor is available please choose one of the following settings:

First contour with Z: Measure at least three points on any flat surface and finish by pressing the number 3 button. Take at least one point to set the height for the surface measured inside the first contour and finish by pressing the number 3 button.

Horizontal (only available for Proliners with an inclinometer): Uses the inclinometer to create a horizontal plane. Measure at least one point in the first contour to set the height for this horizontal plane and finish by pressing the number 3 button.

Note: The horizontal plane can also be used as a reference plane to check the level of the steps.

1.3 Measure

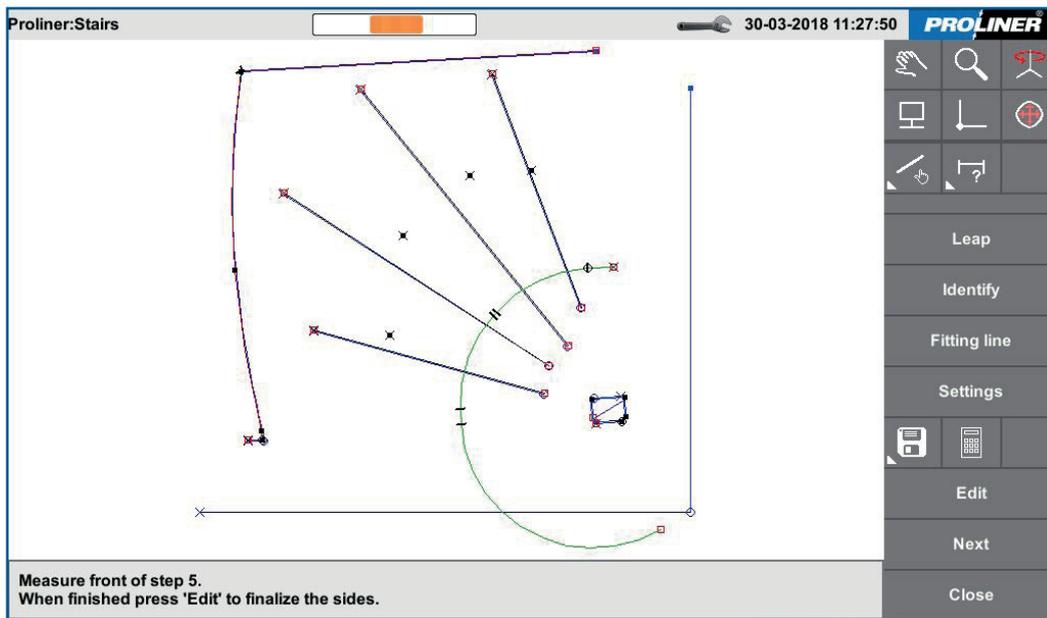
Guided measurement

The measurement part of this app will guide you through the measurement by displaying the required steps in the bottom of the Proliner screen. Make sure you press the number 3 button to continue to the next step.

TIP

Most of the time, measuring single points (button 1) within the same contour, is the best choice. Continuous measuring (button 2) is often counter-productive as you will record all imperfections present on what usually are rough surfaces (i.e. concrete).

Note: The program cannot handle data overlapping each other in top-view. This can be the case when measuring spiral staircases. It is critical that when dealing with overlapping data, the user split the staircases into sections, in such way that from top view, no data is overlapping. Each section needs to be measured in a separate measurement/file.



2.1 Editing

Editing can be started by clicking 'Edit'. This can be done at any point. You'll leave the current screen and go into the familiar Proliner Edit screen. Editing can be used to trim corners, smoothen lines and more. Note! To go back to the report click the >> icon – continue measurement – either zero-index the machine or skip the zero-indexing and you'll be back in the previous screen.

2.2 Identify

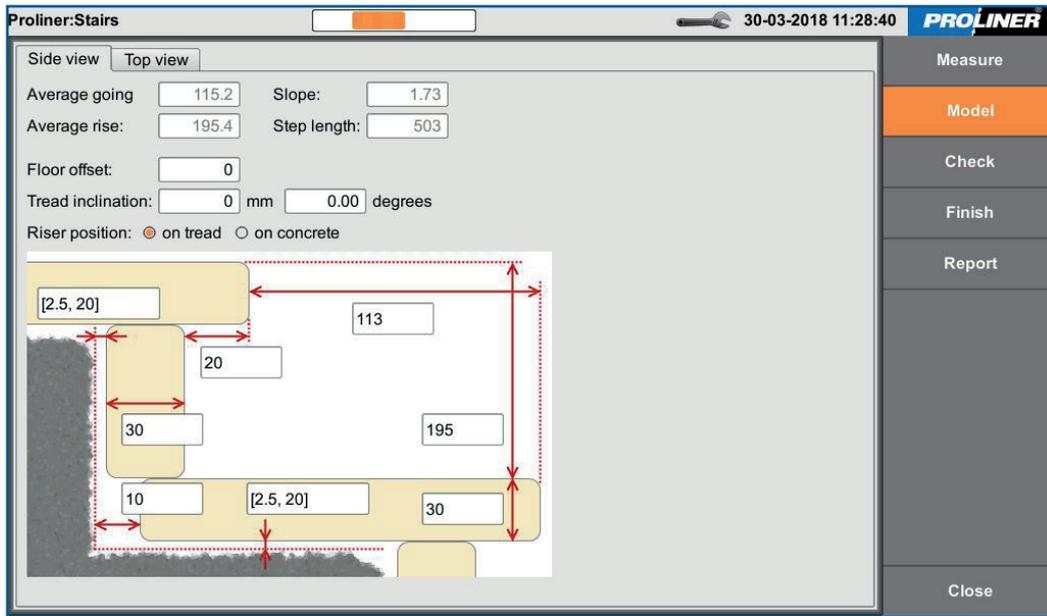
Assign or re-assign labels to the measured contours. If you've measured in any other sequence as was displayed on your screen you are able to assign the correct names using the 'Identify' function.

2.3 Fitting line

A fitting line can be inserted using the 'Fitting line' function. The fitting line represents the ideal walking line on the measured staircase. The default distance for the fitting line is 300 MM from the inside wall, but any value can be entered in the box in the bottom of the screen. Click on the inside wall and click for the position of the fitting line (i.e. inside of the inside wall) to add it to the measurement. Click 'Next' to continue to the report phase of the Stairs app.

2.4 Measure

Will guide you back to the measurement. If you would like to continue the measurement make sure the Proliner device hasn't been moved.



2.5 Model

Model displays a crosscut view of the design of the staircase. Material thickness, overhang, glue margins and more can be set. This interactive model allows you to customize the staircase design.

Side View:

Average going, Average rise, Slope and Step length are calculated based on the measurement.

Floor offset can be used to change the floor level. This can be useful when the final floor hasn't been finished yet.

Tread inclination can be used to create a tread drainage for exterior stairs.

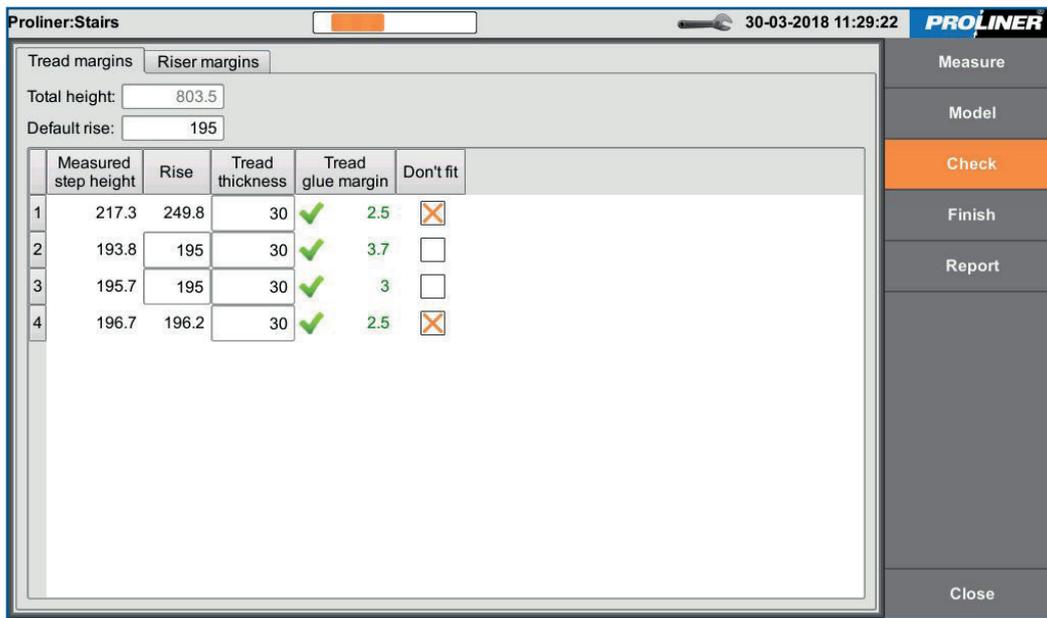
Tread inclination can be entered in inclined height or angle.

Top View:

An offset can be added to create fitting space for the treads and risers.

TIP

When defining the steps height and depth, try to stay as close as possible to the measured values provided by the app inside the 'Model' tab.



2.6 Check

Check will fit the model as defined in the previous step onto the measured staircase and will display the fit (green check mark) or misfit (red cross) for each step and riser.

Sometimes you will have also to accept a very irregular concrete construction does not allow for a regular structure to be fit on. You can still continue even if problems (red-crosses) are present, eventually considering fixing the concrete structure, or having a step with custom depth/height.

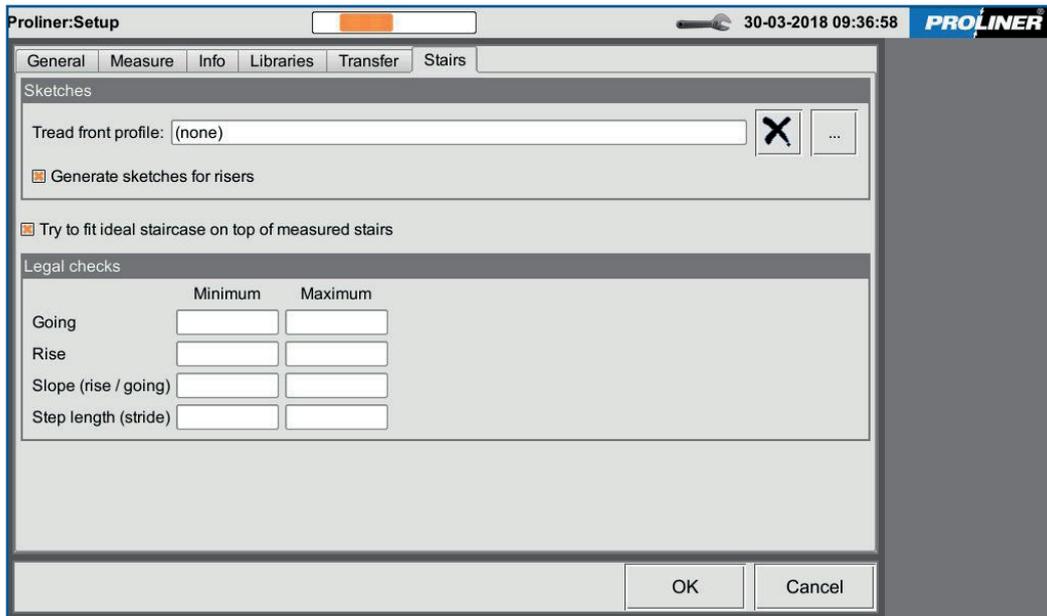
2.7 Finish

Allows to finish the measurement using the editing tools. In particular useful to integrate the first and or last step with the respective floor.

Note: the green lines indicate the original measured shape. The red and blue lines indicate the shape of the separate steps.

2.8 Report

The report phase is identical to the CT report, and will additionally generate a table containing all values for each step. Select the appropriate boxes to include files to the report.



2.9 General settings

The Stairs app contains a dedicated tab within the general settings. Enter the general settings (accessible by clicking the wrench icon in the top bar) and select the 'Stairs' tab.

Tread front profile allows you to select a profile from your library to automatically assign to the front of each step.

Checked box 'generate sketches for risers' automatically generates sketches for all risers.

Checked box 'try to fit ideal staircase on top of measured stairs' activates the 'Check' tab in the design part of the measurement.

If you are already aware of any (legal) constraints you can set minimum and maximum values in the 'Legal Checks' table.



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