



Leica 3D Disto

CAD Tools

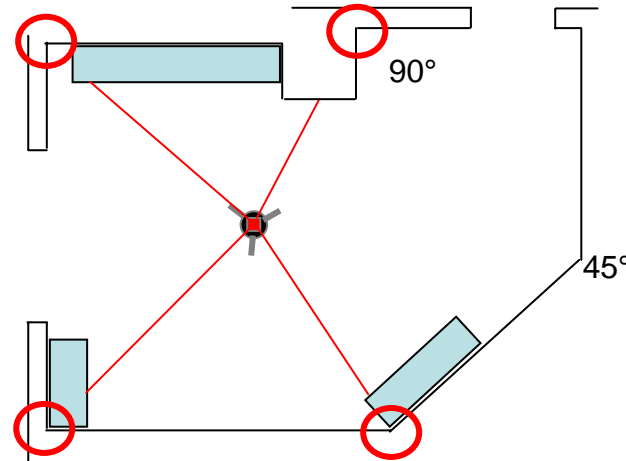
- when it has to be **right**

Leica
Geosystems

CAD Tools

When to use them

- to measure windows, doors and other wall details
- to measure hidden points
- to create corners of exactly 90.000°
- to create preset dimensions
- to complete missing points and edges
- to measure rooms with minimal effort



The tutorial gives examples how to use the CAD Tool.

- when it has to be **right**

CAD Tools

Workflows

The following pages show the start and the simple workflow of the CAD tools.



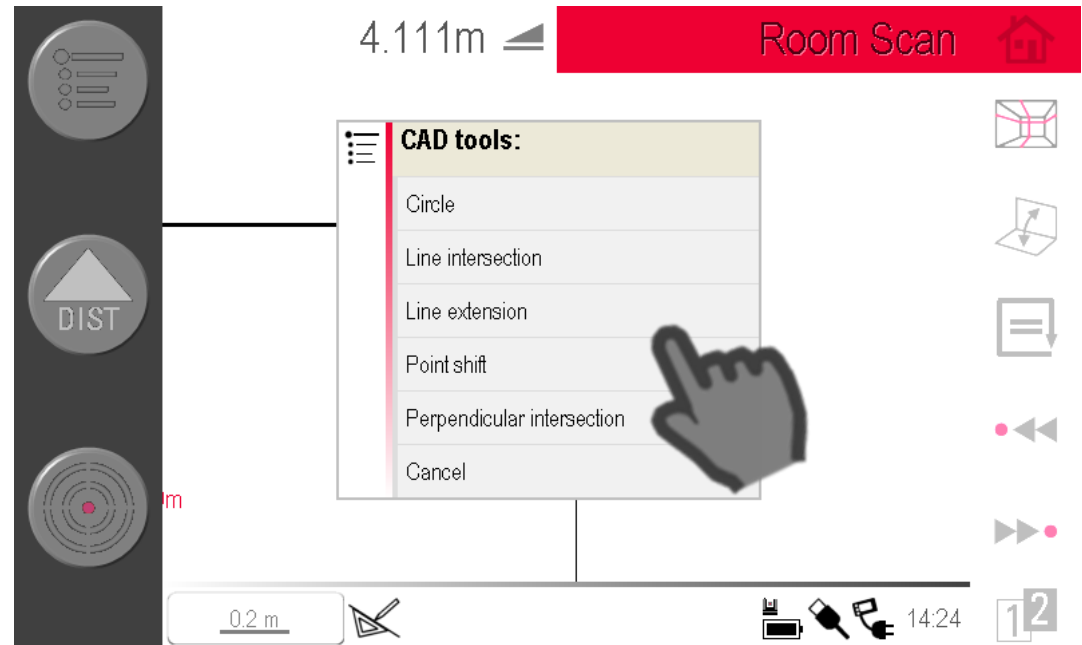
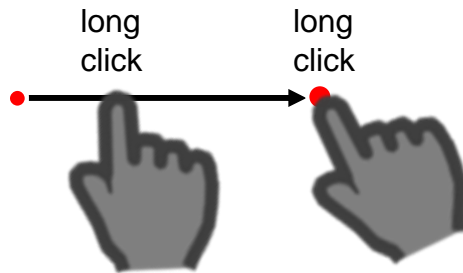
- when it has to be **right**

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CAD Tools

Start & Options

- The CAD tools are offered in the „Room Scan“ application
- To start it, make a long click on a point or on a line in the screen.



- The tool list appears
- Select an option

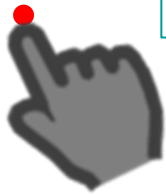
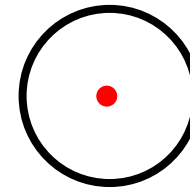
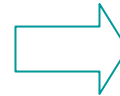
- when it has to be right

CAD Tools

Circle Tool

Draws a circle around the selected point, e. g. to measure plugs, sinks, etc.:

long click
on point

A dialog box titled 'Enter diameter [m]:'. It features a text input field containing the number '0'. Below the input field is a numeric keypad with buttons for digits 7, 8, 9, 4, 5, 6, 1, 2, 3, a plus-minus sign, 0, and a decimal point. At the bottom of the dialog are 'OK' and 'Cancel' buttons. A hand icon is shown clicking the 'OK' button.

- when it has to be **right**

CAD Tools

Rectangle Tool*

Transforms a diagonal line into a rectangle, e. g. to measure windows or doors:



* offered in Unfold Mode only

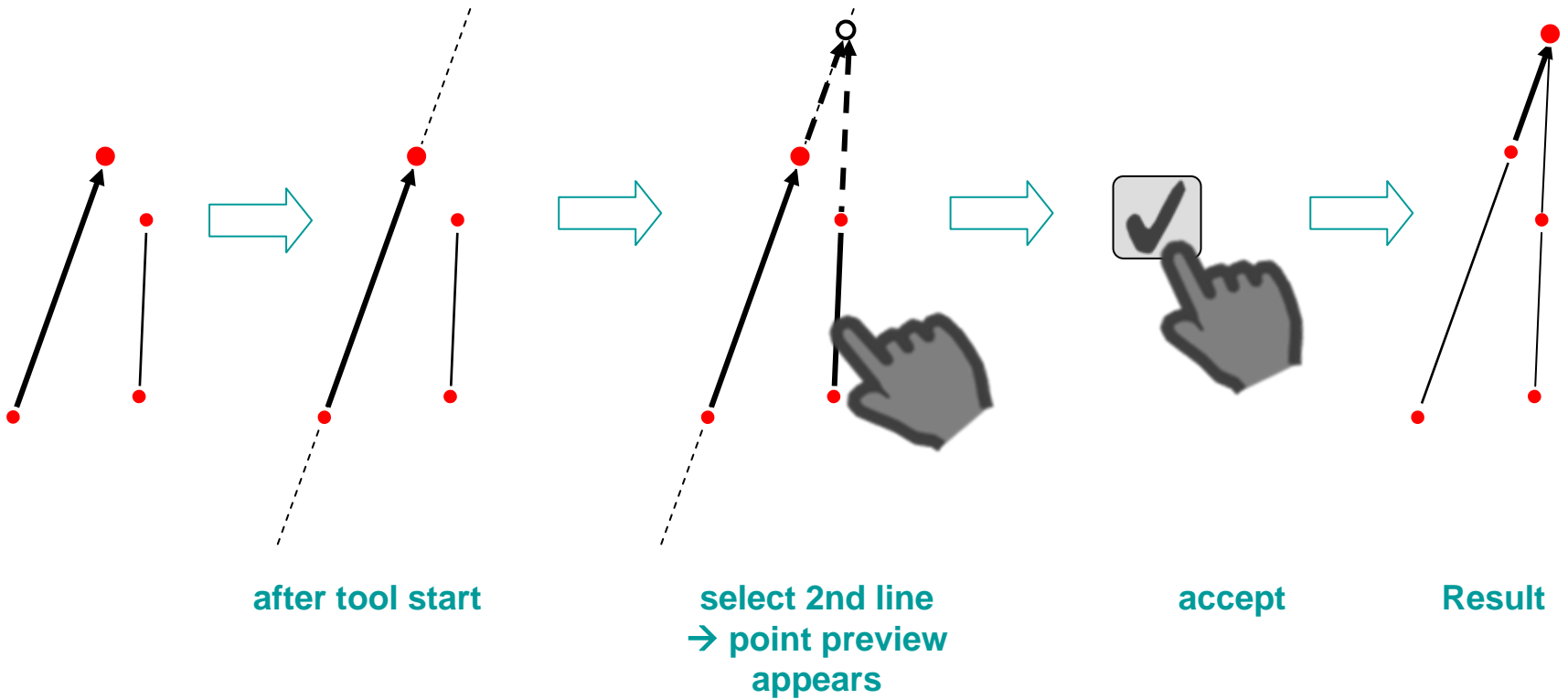


- when it has to be **right**

CAD Tools

Line intersection

Intersects two lines:

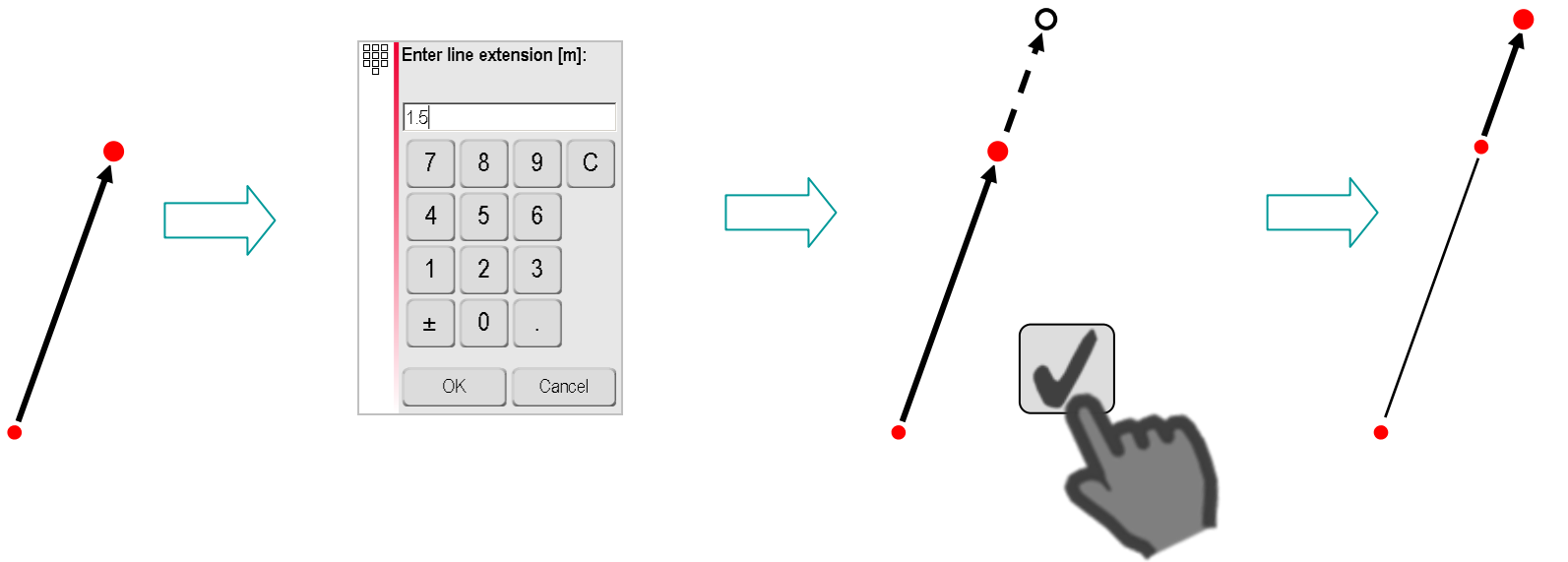


- when it has to be **right**

CAD Tools

Line extension

Prolongs a measured line:



Negative entries
are accepted

Preview of new
point

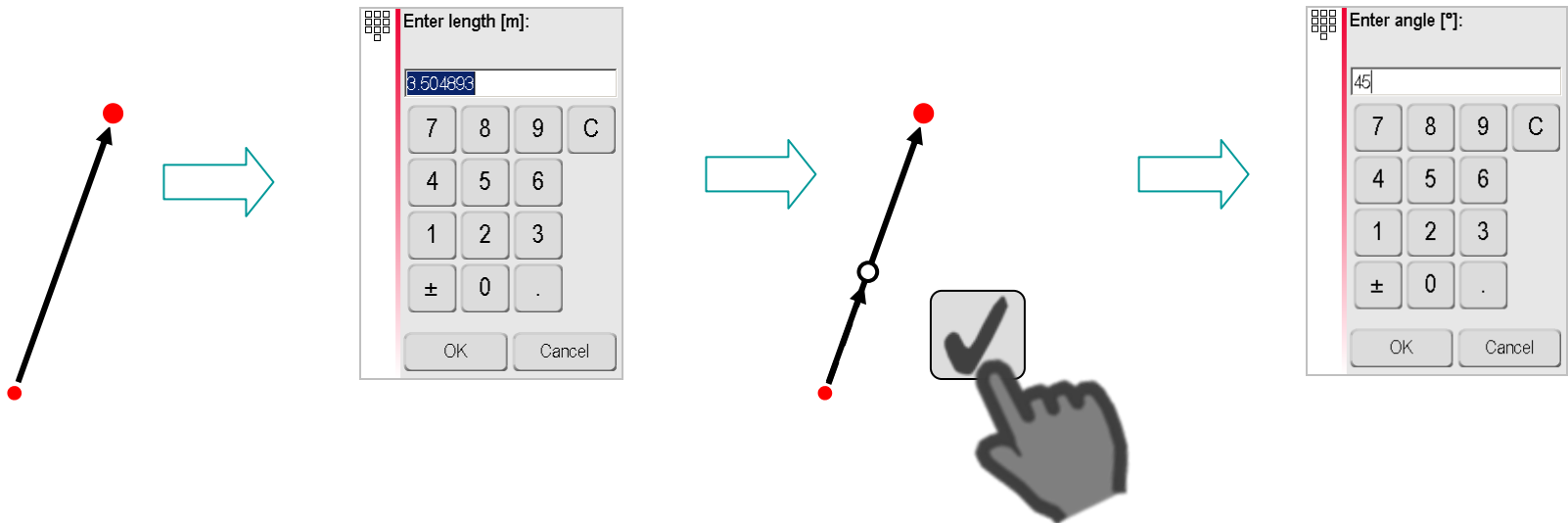
Result

- when it has to be **right**

CAD Tools

Point shift (1)

Generates a point beside a measured line:



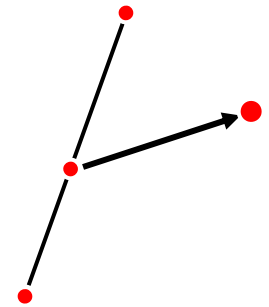
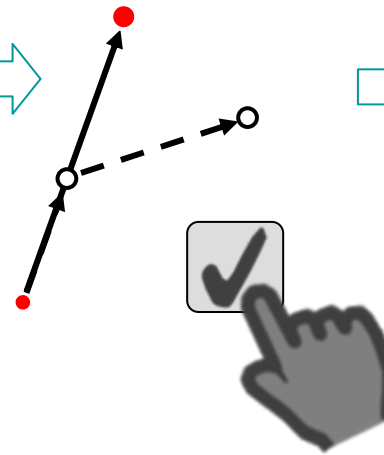
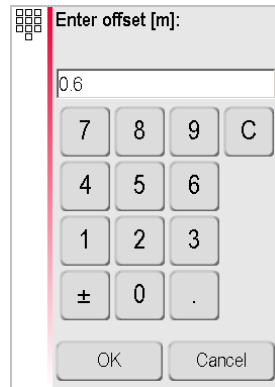
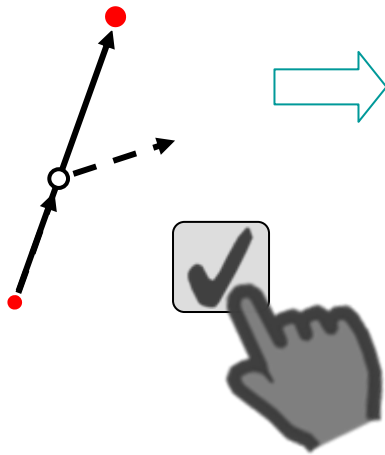
Default = length of
selected line.
Negative entries
are accepted.

Preview of 1st
new point

- when it has to be **right**

CAD Tools

Point shift (2)



Preview of angle

Preview of
2nd new
point

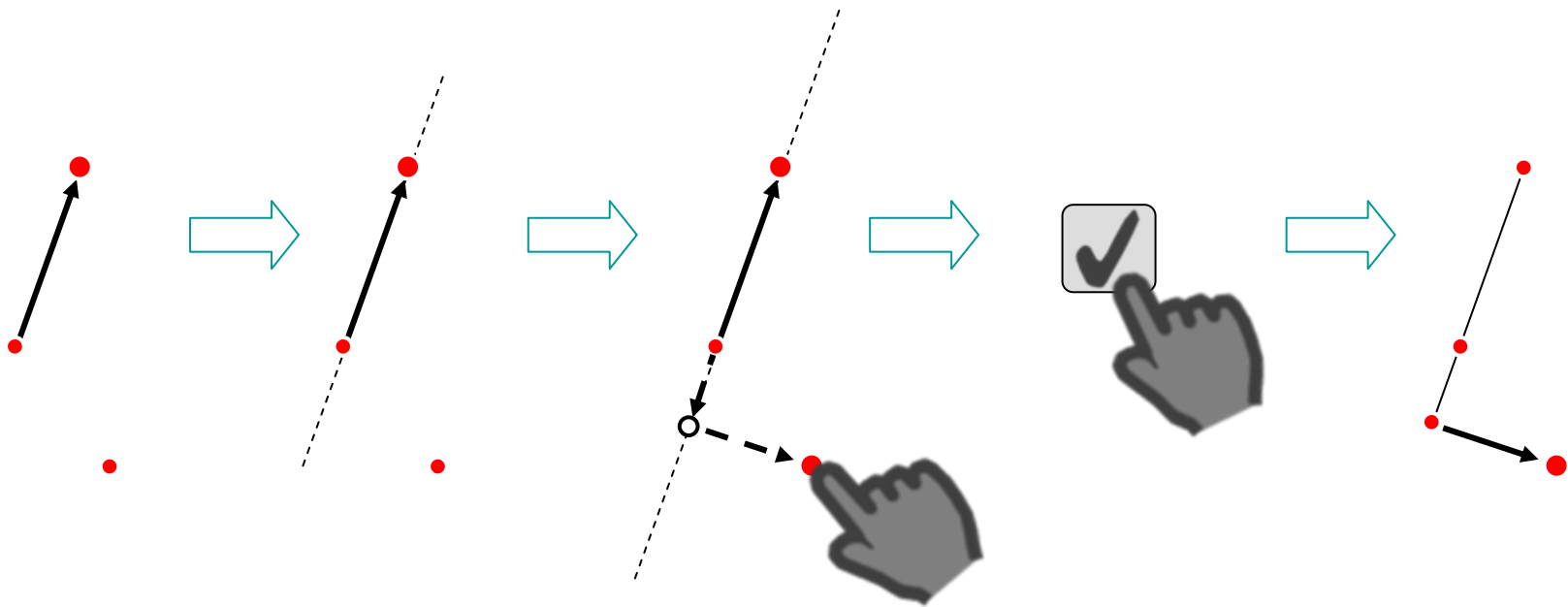
Result

- when it has to be **right**

CAD Tools

Perpendicular intersection

Projects a point perpendicular to a line and creates a right angle:



after tool start

select a point →
preview appears

accept

Result

- when it has to be **right**

CAD Tools

Examples

The following pages show some examples how to use the CAD tools effectively.



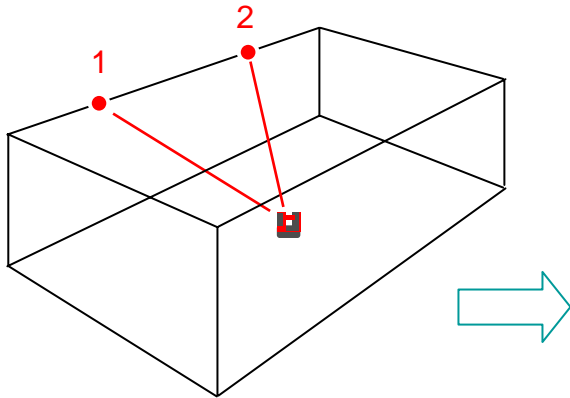
- when it has to be **right**

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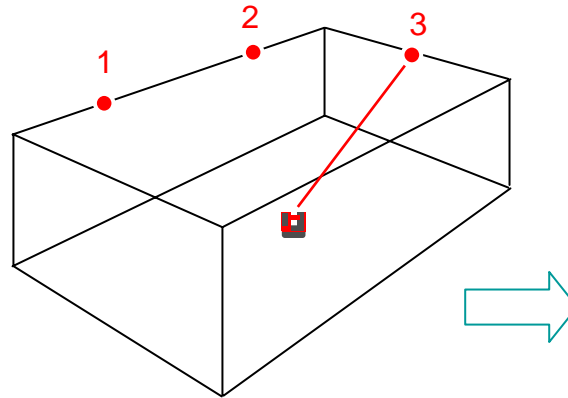
CAD Tools

Quick room measurement (1)

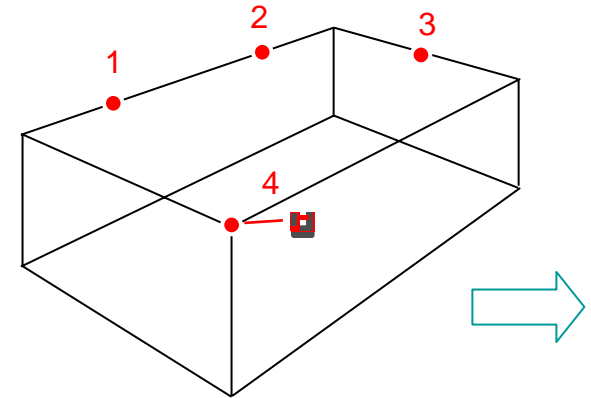
How to measure a room's footprint with 4 points using the „perpendicular intersection“ tool (all corners 90°; walls parallel):



Measure P1 and
P2 on the wall.



Measure P3 on
nearby wall.
Do not target the
corner.



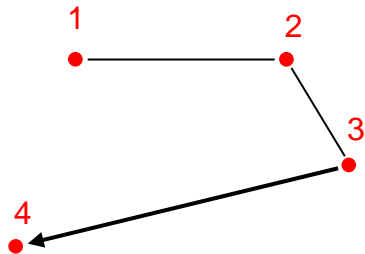
Measure P4 in
opposite corner.

- when it has to be right

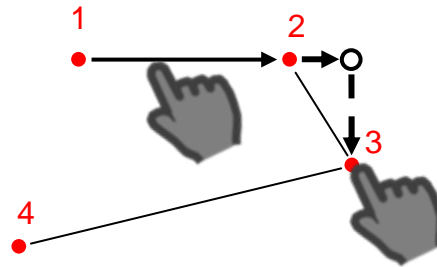
CAD Tools

Quick room measurement (2)

Now use the CAD tools to complete the measurement:



Actual screen content



Start „perpendicular intersection“ on 1st line, then tip on P3



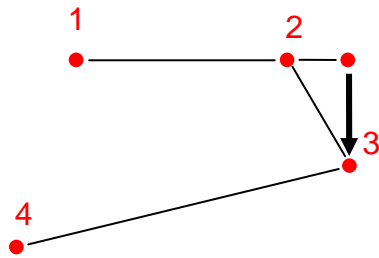
Accept

- when it has to be **right**

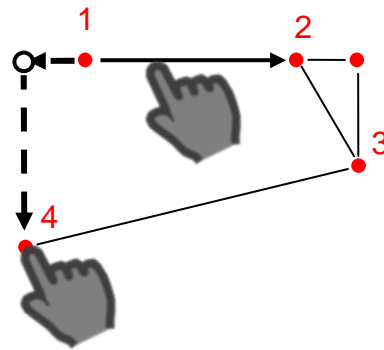
CAD Tools

Quick room measurement (3)

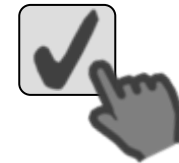
Continue:



Result



Repeat with 1st
line and P4



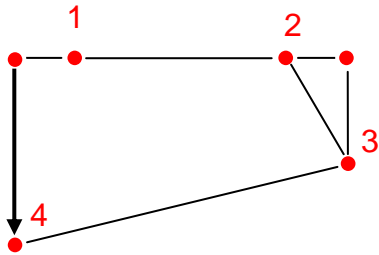
Accept

- when it has to be **right**

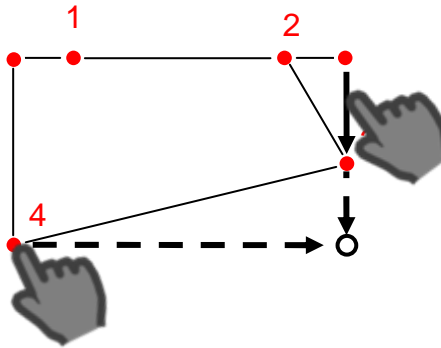
CAD Tools

Quick room measurement (4)

Continue:



Result



Repeat



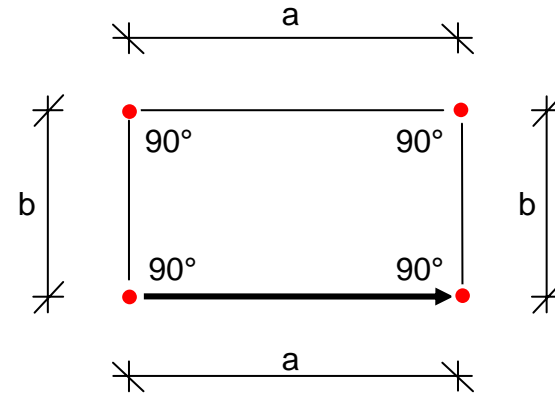
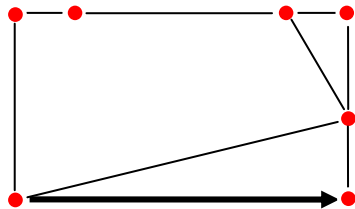
Accept

- when it has to be **right**

CAD Tools

Quick room measurement (5)

Continue:



Result



optional: use
the toolbar
keys for
finishing



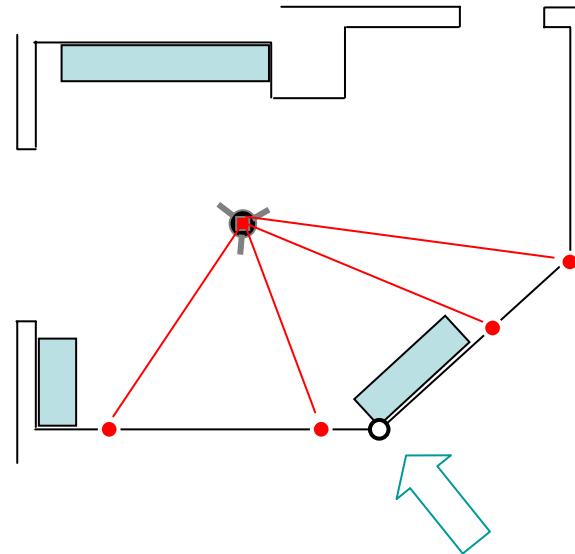
Result

- when it has to be **right**

CAD Tools

Hidden Corner / Line intersection

- measure 4 points on two walls
- use „Line intersection“ tool to determine hidden corner

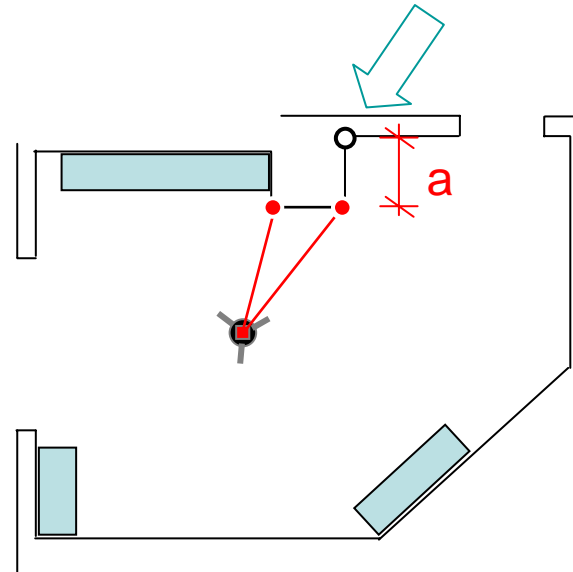


- when it has to be **right**

CAD Tools

Measuring around the corner with “Point shift”

- measure 2 corners with 3D Disto
- measure „a“ by hand
- start „Point shift“ tool
- enter 90°
- enter „a“ to create the hidden point

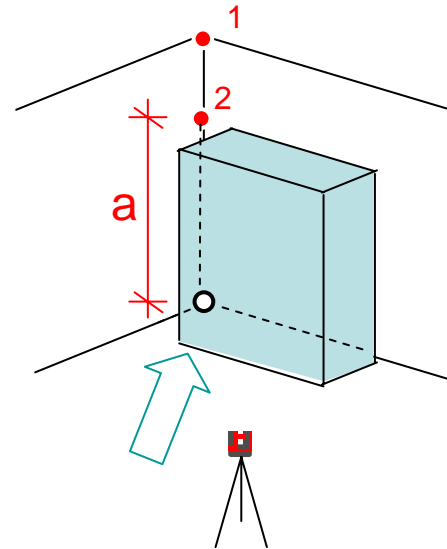


- when it has to be **right**

CAD Tools

Measure a hidden point with “Line extension”

- measure P1 and P2 in the corner
- measure „a“ by hand
- start „Line extension“ tool on line P1→ P2
- enter „a“ and accept



- when it has to be **right**

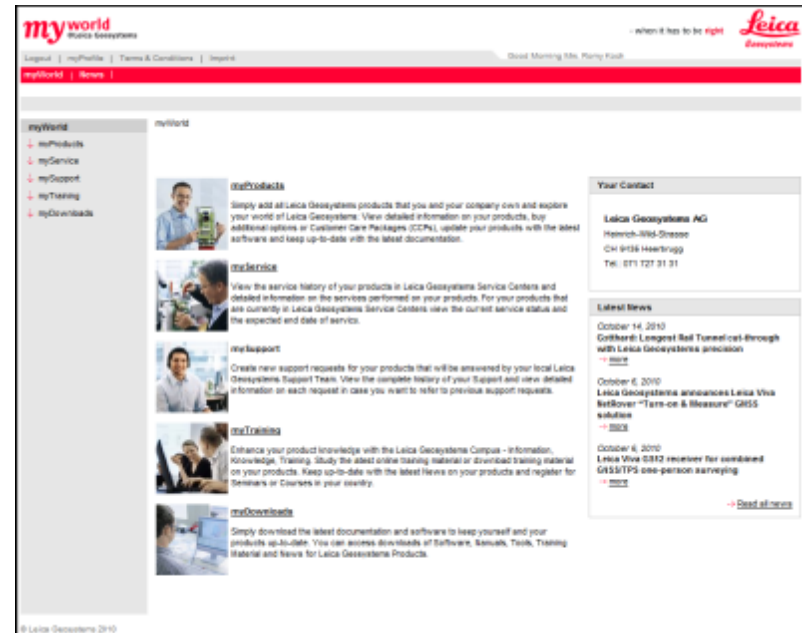
myworld

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