

Installation Guidance Note: Measuring Non-Rectangular Matwells

This guidance note is designed to explain how to measure a non-rectangular matwell to enable a Nuway rigid entrance barrier system installation.

PLEASE NOTE:

Measurements need to be accurate and precise to the millimetre.

Prior to measuring, the matwell frame/surrounds should all be fixed, and the base floor should be clean, level and the area free from obstruction and/or other workers.

Tool requirement's for measuring matwells include:-

- 3.4.5 large 90-degree set square
- Tape Measure
- Note pad & pen
- Large straight edge
- Chalk line
- Gloves, knee pads and any other PPE equipment that meets the requirement of the site

When measuring non-rectangular matwells you will need to find a 90-degree corner or if there is not one you will have to create one.

The first part of this guide covers measuring a non-rectangular matwell that has a 90-degree corner.

You will need to take all your horizontal and vertical measurements from the two Axis points of the 90-degree corner.

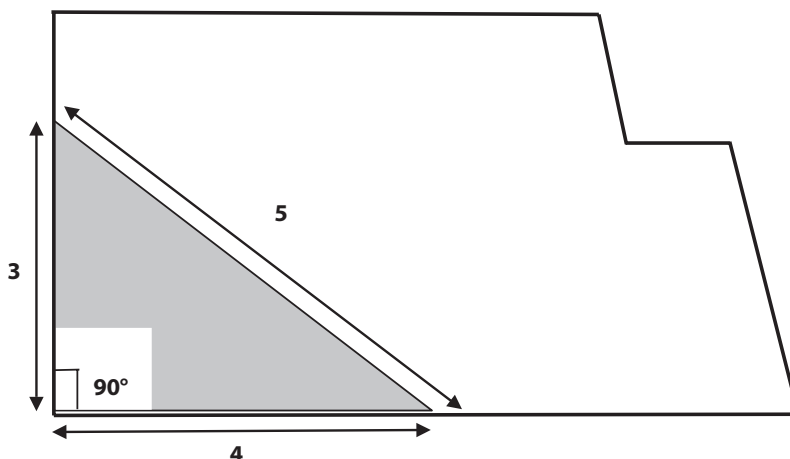
- **Axis 1** – Horizontal measurements which run left to right (L/R) across the doors
- **Axis 2** – Vertical measurements which run front to back (F/B) into the building

Step 1 – Define a 90-degree corner

This can be done either by using a large 90-degree set square which is simply laid on the floor against the matwell frame or using measurements a 3.4.5, 90-degree triangle.

To create a 3.4.5, 90-degree triangle the frame edges should be measured and marked at 3-metres on the F/B frame edge and 4-metres on the L/R frame edge, if the frame edges are running at 90-degrees to each other this should leave a measurement of 5-metres between the two marks.

See below a 3.4.5, 90-degree triangle.



Step 2 – Taking measurements

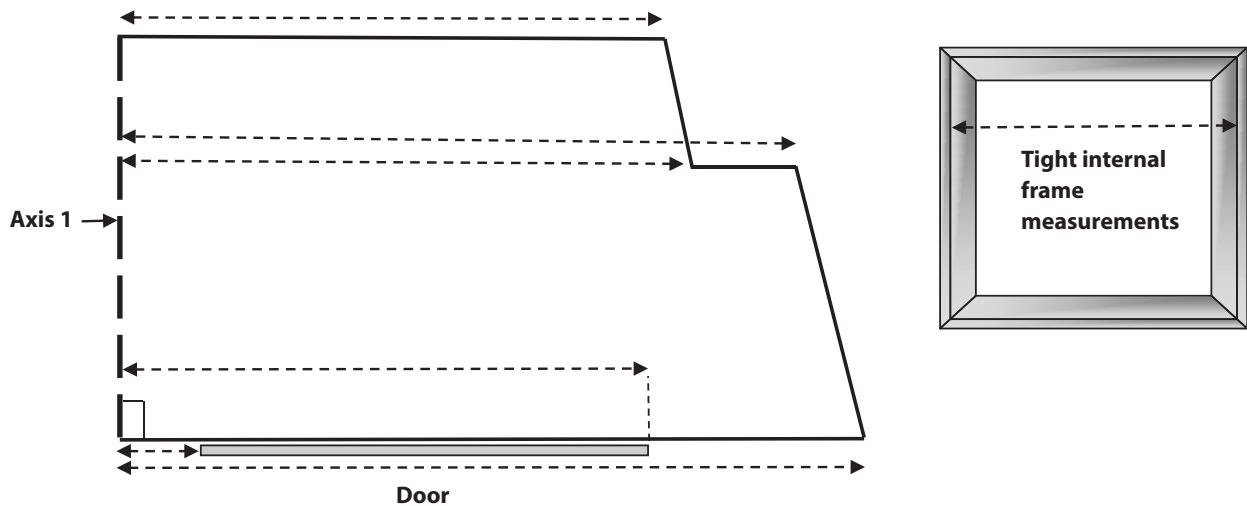
The example below is a non-rectangular matwell with a double door.

Horizontal measurements:

The plan below shows Axis 1 with all perpendicular (L/R) measurements come off the edge.

Sketch out the shape of the matwell on a writing pad and mark a 90-degree symbol against corner of the matwell frame. Add the measurements to the sketch as you are taking them.

Measurements should always be taken tight against the internal frame (see detail below).



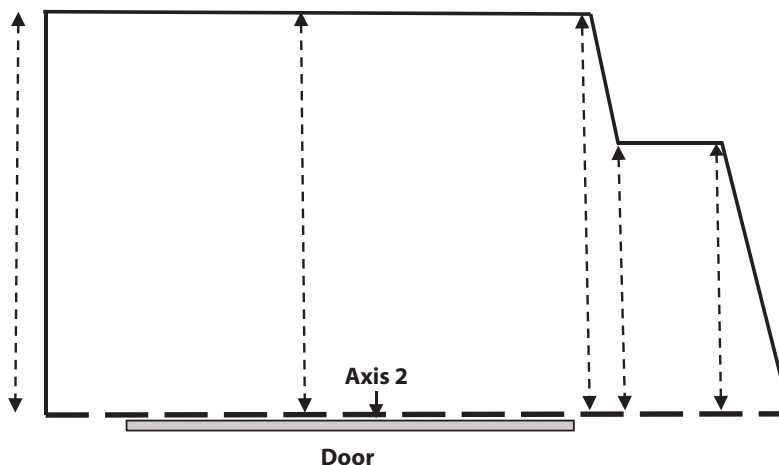
The position of the door in relationship to the matwell will also need to be measured, this will aid the planning process as larger matwells may require a T-bar joint strip (see detail below) which may be required to come off the door posts for aesthetic reasons.

Door position measurements should come off Axis 1.

Vertical measurements:

The plan below shows Axis 2, all vertical (F/B) measurements come off this edge.

Continue to add the measurements to the sketch as you are taking them.

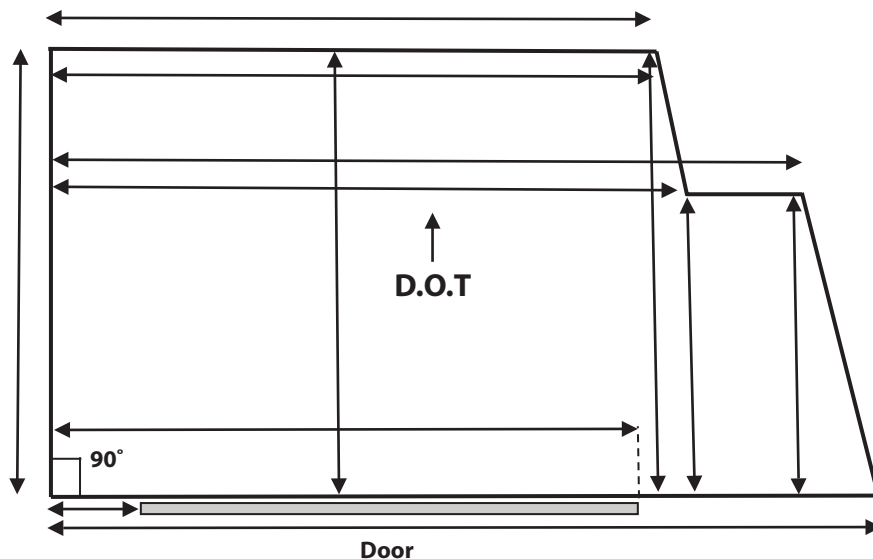


Step 3 – Measure the matwell depth

Entrance matting comes in various thickness's and therefore, it is imperative to measure the matwell depth from the top edge of the frame to the matwell base floor, alternatively you could lay a sample of the matting on the floor against the matwell frame.

Step 4 – Check that you have taken all the measurements and confirm the direction of traffic (D.O.T) on the sketch with an arrow symbol. The D.O.T is very important as rigid entrance matting is designed to be trafficked in one direction (across the rib of the matting).

Prior to leaving site check that you have taken all the measurements including the matwell depth and recorded the D.O.T on the sketch.

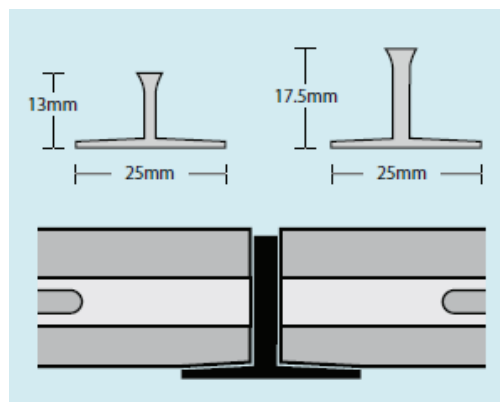
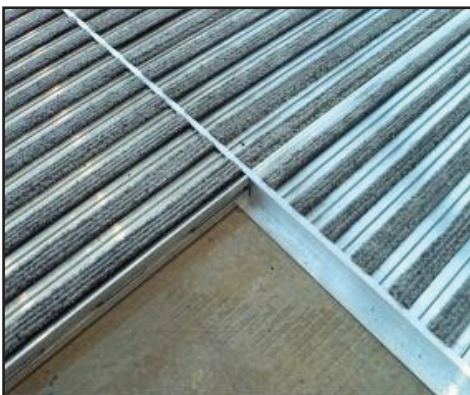


Step 5 – Send your sketch with all relevant information to Forbo Flooring UK Ltd (see Forbo contact details on the last page).

Tip: Take both overall photos and around the parameters, these act as references and show the shape of the matwell footprint when measured.

T-bar joint strip detail

T-bar is a joint strip installed where mat sections meet each other L/R on their length.



The example below shows a non-rectangular matwell with no 90-degree corners

Step 1 – Creating a 90-degree datum line

This can be done either by using a large 90 degree set square which is simply laid on the floor running off Axis 2 (nearest door) or by using measurements a 3.4.5, 90-degree triangle.

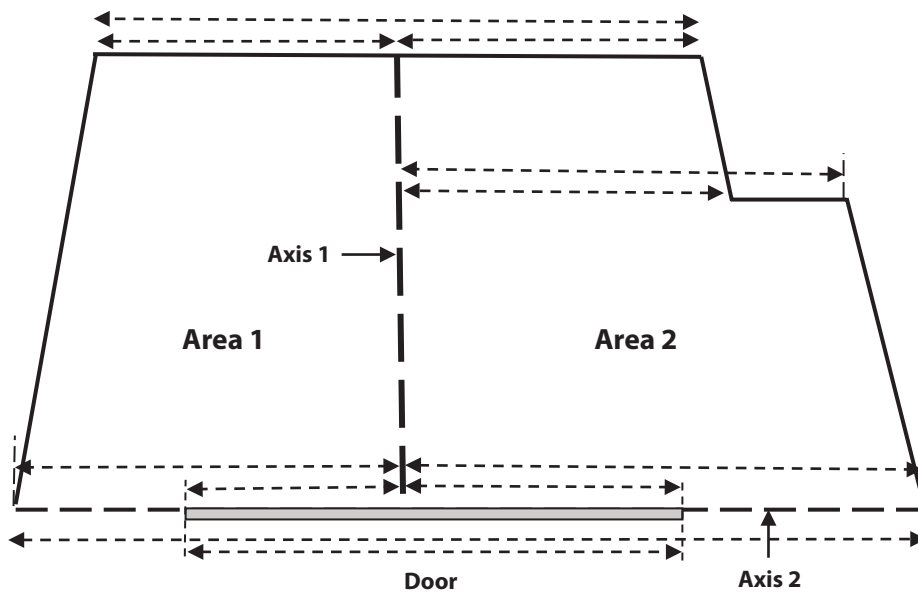
Strike a chalk line on the floor at 90-degrees from Axis 2.

Step 2 – Taking Measurements (area 1 and area 2)

Horizontal measurements

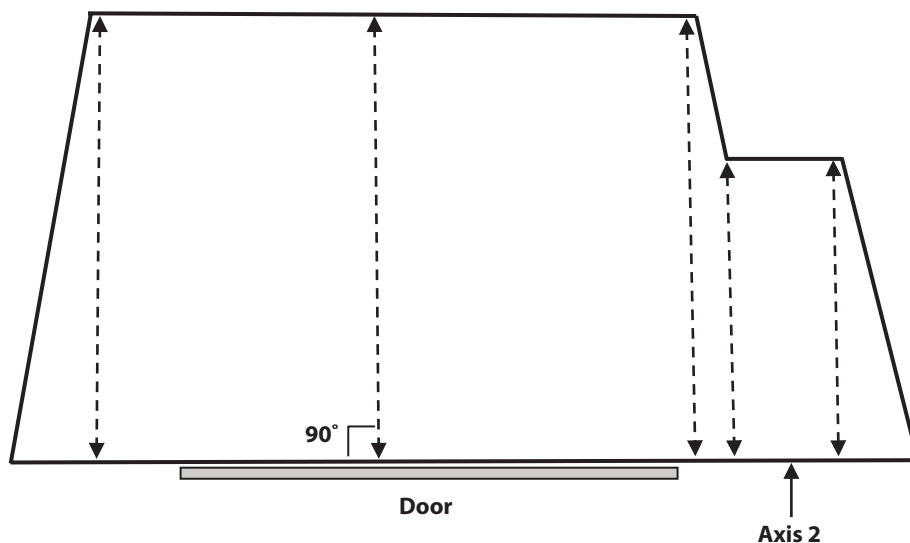
The area can now be measured as two separate areas (area 1 and area 2) due to there being a 90-degree datum line.

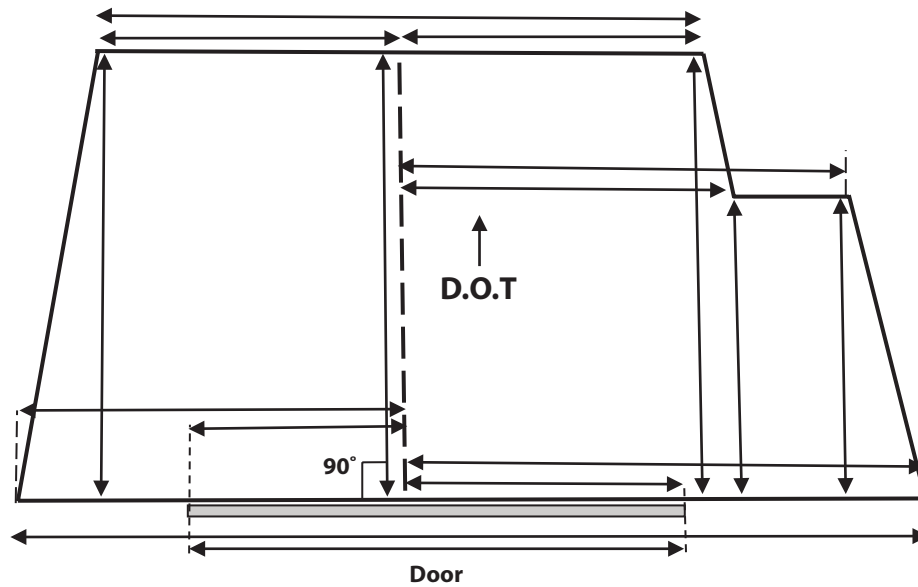
Mark a 90-degree symbol against the datum line and Axis 2, measure either side of the centre datum line recording all sizes on a sketch, all L/R measurements coming off Axis 1.



Vertical measurements

All vertical measurements (F/B) measurements come off Axis 2, continue to add the measurements to the sketch as you are taking them.





Steps 3, 4, 5 are as above

Forbo Contact Details

Send your measurements/sketch along with your name, contact detail, company name, project detail and the specification of the matting along with any photos to Forbo Flooring UK Ltd via post or email.

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