



# How to Make a Profile

In this video, you will learn how to set up profiles.

The tools that you will need are:

Trowel

Mortar pan

String

Spirit Level

Straight Edge

Plumb Bob

and Mason's Square

The materials that you will use are:

Bricks

and Mortar

Don't forget to use Personal Protective Equipment, including:

Safety Gloves

Reflective Jacket

Safety Helmet

Safety Shoes

and Dust Mask

Profiles are reference guides placed on either side of a wall with a string running between them. They help maintain the level and alignment of a course as the mason lays bricks alongside the string. We have used bricks and mortar to make our profiles, though it may also be done with measuring poles or columns.

To setup a profile, you need to identify the points between which you plan to build the walls.

Mark point A at the corner where the two walls will meet. Now, find the 4 feet point from A in the direction of the first wall and mark point B. Point C will be at a right angle from the line AB and will indicate the direction towards which we

will lay the second wall.

Use the 3:4:5 principle to find point C and therefore the angle of the second wall. According to this principle, if AB measures 4 units, AC measures 3 units and BC measures 5 units, then, as a rule, the angle BAC will always measure 90 degrees.

Once you have found the points A, B and C, you can start laying the profiles.

Lay a mortar bed to accommodate a single brick next to the point A and place a brick on it such that its length is exactly aligned with the line AB. Now, apply a mortar bed and lay a brick next to point B, again with the length of the brick aligned with the line AB.

Next, apply a mortar bed and lay a brick near point A such that its length is aligned with the line AC. Now, lay the mortar bed for the last profile at point C, with the length of the brick aligned with the line AC.

Use the Tube level to ensure that all the bricks are at the same level. Do this by first placing the wooden strip of the Tube level over the first profile brick and marking the reference level. Now make sure that the remaining three profile bricks are adjusted to the same level as the first.

Once the profile bricks have all been leveled, you may now set up the mason's line. The mason's line can be fastened by simply tying one end of a string to a brick that is placed on the profile brick, as shown here. Start by fastening the string at the first profile. Ensure that the string is exactly aligned and in contact with the length of the profile brick. Place yet another brick on top of the one the string has been tied to for support. Now, tie the free end of the string at point B.

Take a second string and fasten one end to the profile brick at point A that is in line with the line AC. Fasten the other end of the string to the profile at point C.

Ensure that the mason's lines are aligned with the lines AB and AC respectively.

You may now remove the nails and string making up the triangle ABC.

The profiles guiding the first course ARE ready and you can begin building the walls.

Once the first course has been completed, the profiles needs to be raised by a level to guide the second course. Instead of building a second level on the profiles, we simply lay the corner bricks of the course and fasten the line between them. Apply the mortar bed and lay bricks on both ends of the first wall. Check the alignment and level of the bricks using the plumb bob and a spirit level. When comparing the levels between two distant profiles, you may use a Tube Level to transfer the vertical plane. Now, fasten the mason's line to either profile.

Once the second course of the first wall is completed, you may transfer the profile to the second course of the second wall.

Repeat the same process for every successive course.

You have now learned to make a profile.

<https://www.sikana.tv/en/diy/masonry/how-to-make-a-profile>