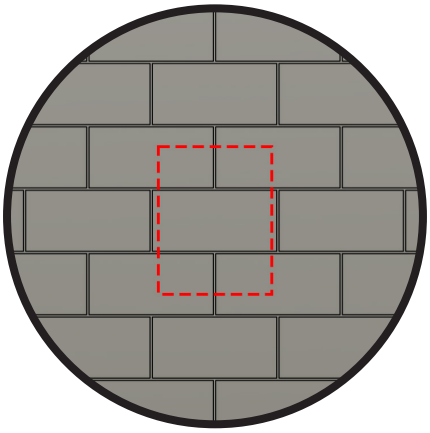
Solid Wall Install of the Amina MobiusiB Series

The following guide has been prepared to illustrate the install process of the Amina MobiusiB Series in a Solid Wall application. It is important that all the steps listed below are followed carefully to ensure a successful, hassle-free installation.
The installation requires 4x wall plugs & fixing screws which are not supplied with the product.
If further assistance is needed, the Amina Technical Support Team are on hand to help. They can be contacted on: +44 (0) 1480 354390.

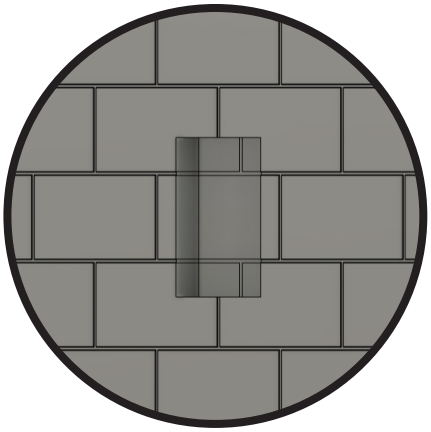


STEP 1:

Mark the location of the Loudspeaker cut-out on the wall. The cut-out dimensions for the various sizes of the Amina MobiusiB range can be found below:

- **200-Size iB -> 208mm x 460mm (8 3/16" x 18 1/8")**
- **300-Size iB -> 308mm x 410mm (12 1/8" x 16 1/8")**
- **345-Size iB -> 353mm x 460mm (13 7/8" x 18 1/8")**

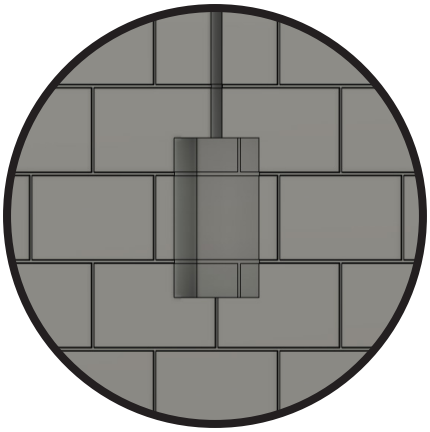
Ensure there is plenty of blockwork at the top/bottom of the cut-out, as this is where wall plugs will be installed later on in the install process.



STEP 2:

Once the wall is marked, the next step is to cut-out the cavity in the masonry for the Loudspeaker.
We recommend using an angle grinder and a jackhammer drill to create the cavity in the wall.

All Amina MobiusiB Loudspeakers have the same product depth, so no matter which Loudspeaker you are installing, **the cavity must be a minimum of 82mm (3 1/4").**

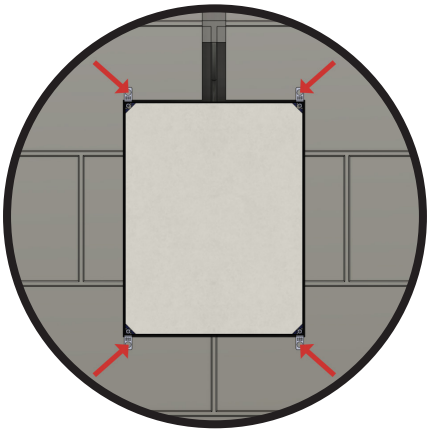


STEP 3:

Once the cavity has been cut, it is important that all cable channels are also cut before the Loudspeaker install begins.
We recommend that the Loudspeaker is installed with the cable gland facing upwards, therefore, a cable channel will be required top-centre of the cavity cut-out.
Due to the location of the cable gland on the Loudspeaker backbox, the cable channel also needs to have a minimum depth of 82mm near the Loudspeaker cavity in the wall.

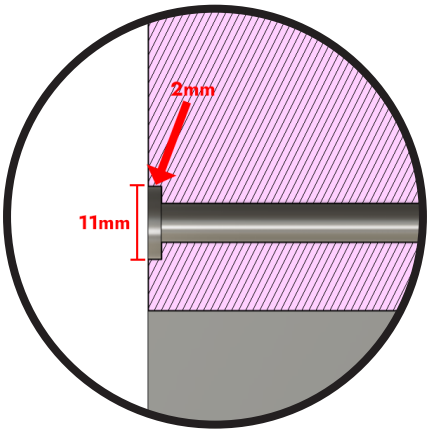
STEP 4:

Once all the masonry has been removed, it is imperative to check that all the blockwork has been cleanly cut and there is no loose blockwork in, or around the cavity.
Please also ensure that the cavity has been thoroughly cleaned out, ensuring there is no debris, dust, etc, left inside the cut-out which could cause issues later on in the installation process.



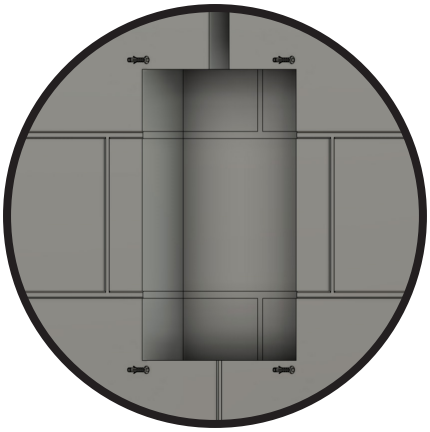
STEP 5:

Next, offer the Loudspeaker up to the cavity to check there are no issues with the fit - If there is a problem, identify the obstruction that is stopping the Loudspeaker from sitting correctly in the cavity and remove it. Remember to clean the cavity again if making corrections.
There should be a 2mm gap round the perimeter of the Loudspeaker and no blockwork should touch any part of the Loudspeaker.
Once the Loudspeaker sits inside the cut-out without issue, with a permanent marker, mark the 4x tab holes shown in the picture on the left.
Carefully, store the Loudspeaker back in the carton, or somewhere safe on site where it will not be subject to damage.



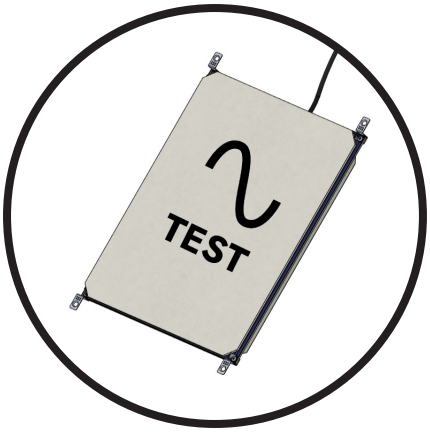
STEP 6:

The next stage is to drill the 4x holes ready for inserting the wall plugs. It is important to follow the chosen wall plugs manufacturers specification on hole diameter and hole depth.
We recommend a wall plug of the following specification:
6mm x 30mm ($^{1}/_{4}$" x 1 $^{3}/_{4}$")
The mounting tabs on the MobiusiB Series has a countersink of the rear of the tab, therefore, a 11mm x 2mm ($^{7}/_{16}$" x $^{1}/_{16}$")counterbore is required at the top of the mounting holes to allow the tab to sit flat against blockwork.



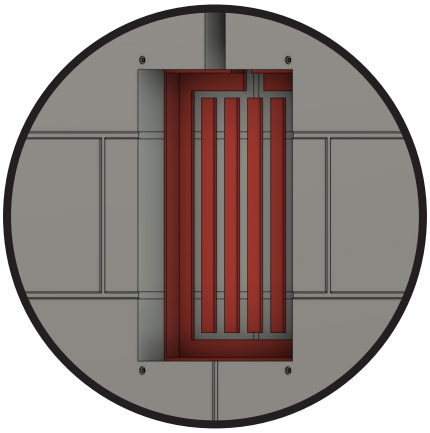
STEP 7:

Once the holes & counterbores are drilled, fit the wall plugs into the holes, ensuring they are pushed through the entirety of the counterbore, so the top of the wall plug sits flush with the top of the wall plug hole.



STEP 8:

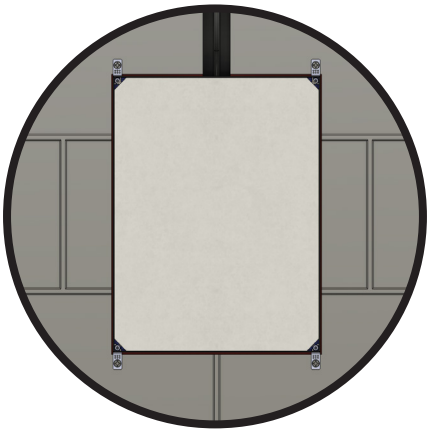
Now that the cavity has been prepared, it is recommended to test the Loudspeaker before fixing it to the wall in case the Loudspeaker was damaged in transit.
When testing, ensure that the correct Amina Protection Filter is in place, or a DSP amp is being used with Amina's recommended settings, to not cause any damage to the Loudspeaker.
Listen out for any buzzes or rattles whilst testing with a Sine signal.
If an issue arises, please contact Amina's Technical Support Team who are on hand to help: +44 (0) 1480 354390



STEP 9:

It is important that once the Loudspeaker is installed that there are no air gaps between the blockwork and the Loudspeaker.
We recommend spraying expanding foam into the back of the cavity and round all 4x sides of the cavity as shown in the picture on the left.

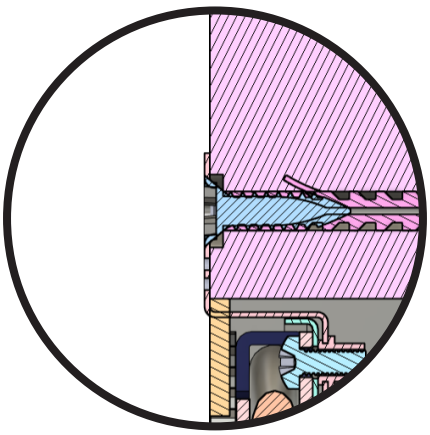
Note:. It is important that this step is not completed until you are ready to move on with Step 9.



STEP 10:

Using the appropriate screws for the wall plugs used in Step 7, screw the Loudspeaker to the wall.
It is recommended at this point to also connect the Loudspeaker to the Audio cable that has been routed in the wall - The product is supplied with 2x Wago 221-Series In-Line connectors for ease of connection.

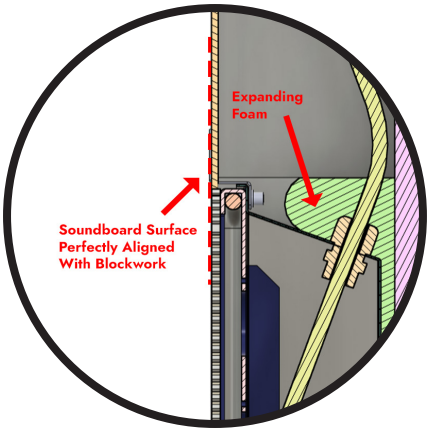
Note:. If the Audio cable is also connected to the Amplifier, ensure that the correct Amina Protection Filter is connected in-line, to avoid damage to the Loudspeaker.



STEP 11:

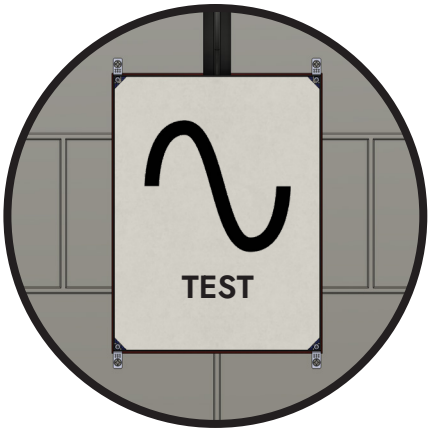
With the Loudspeaker screwed to the wall, check that the rear surface of all 4x mounting tabs are sitting flat to the front surface of the blockwork.
If required make adjustments, so that these sit perfectly flat to the wall.

Note:. The thickness of the tab will protrude past the front surface of the blockwork.



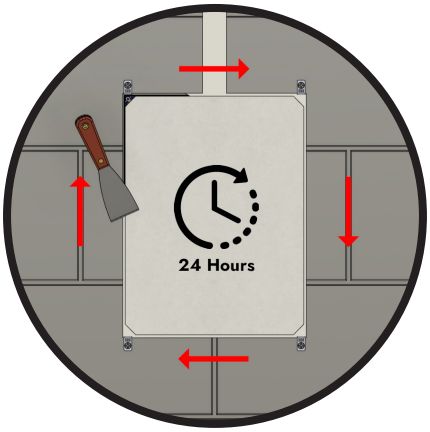
STEP 12:

Before proceeding any further, it is also important to check that the front surface of the Loudspeaker soundboard is aligned with the front surface of the blockwork to ensure that an even coat of plaster is applied to both the wall & soundboard later in the installation.



STEP 13:

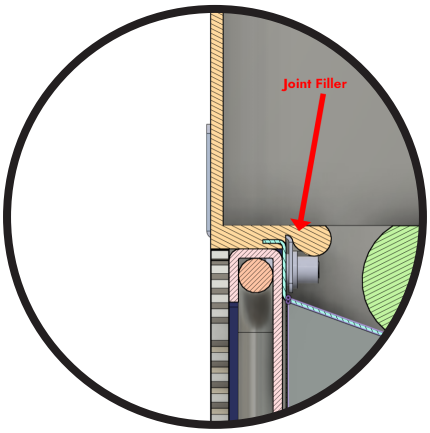
Before committing to plastering the Loudspeaker in, the Loudspeaker should be tested thoroughly to make sure there are no issues with the install.
When testing, ensure that the correct Amina Protection Filter is in place, or a DSP amp is being used with Amina's recommended settings, to not cause any damage to the Loudspeaker.
Listen out for any buzzes or rattles whilst testing with a Sine signal. If an issue arises, try to locate the source of the unwanted buzz/ rattle, so this can be fixed.
Amina's Technical Support Team are on hand to help with any issues that cannot be easily fixed: +44 (0) 1480 354390



STEP 14:

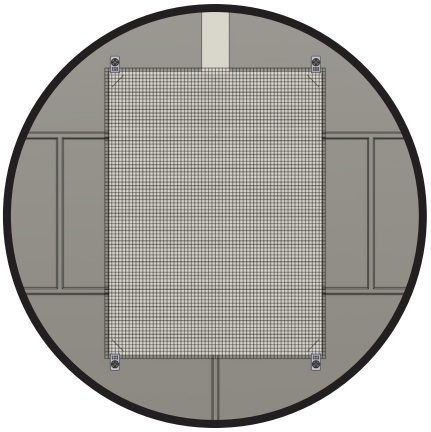
Once the Loudspeaker has been tested and there are no issues, the next step is to fill the gap between the edge of the blockwork and the edge of the soundboard.
A good amount of joint filler should be pushed into the gap to guarantee a strong bond between the blockwork and the soundboard - Amina recommend British Gypsum Joint Filler ®.

Note:. Allow the 'Joint Filler' to dry fully for 24 hours before proceeding with the next step of the install.



STEP 14 Continued:

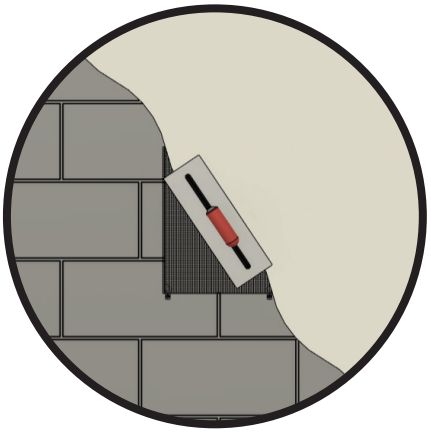
The picture on the left shows the level of joint filler that is expected to be pushed into the gap to achieve the desired effect.



STEP 15:

Apply sticky-backed Fibreglass Mesh Tape to the entire soundboard surface, whilst also overlapping the joint.

This can be supplied in rolls, 500mm x 50m, by Amina if required: SKU -> JointScrimTape



STEP 16:

Finally, the wall/Loudspeaker can be skim plastered to a maximum thickness of 2mm ($^{5}/_{64}$").

Note:. More than 2mm ($^{5}/_{64}$") will not only effect the Loudspeakers performance, but will also invalidate the Amina Manufacturers Warranty!