

Floodstop Generic Assembly Instructions

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Online details, including assembly videos, can be viewed at www.fluvial-innovations.co.uk. Please read the following instructions carefully before assembling and storing your Floodstop system.

Assembly Instructions (0.9m and 0.5m Floodstop):



- Inspect ground conditions and clear any debris.
- Position modular units out in a linear position for the chosen barrier length. Do not apply a significant degree of movement until the barrier is fully assembled. Ensure that all self-filling holes are able to fill with the rising waters if a flood does occur.

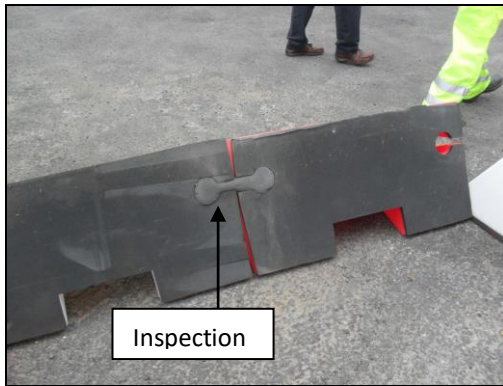


- In a standard configuration – every other or every third modular unit (at a minimum) in an assembly should be a 'pre-fill' unit type.

Any modular unit without semi-circles holes on their front face must be pre-filled with water ballast before use.



- Insert connection keys (universal keys) ensuring each key is fully inserted. The base of each connection key should be in full contact with the ground. Correct insertion can be validated in one of two ways:
 - I. Lean the two connected modular units over and visually inspect the base connection seal
 - II. Ensure the crest of the universal key is raised by 70mm (0.5m high Floodstop system) above the crest of the modular unit.



- Once the universal keys are in place curvature can be applied to the barrier if required.
- Fill the 'pre-fill' units along the assembled Floodstop barrier with water. Pre-fill units must be filled to the brim. This step ensures a preliminary seal along the base of the whole barrier.



- To create a connection with an insitu object such as a wall the Multi-hub unit should be employed. Simply connect the unit to the end of the assembled Floodstop barrier:
 - Rotate the Multi-hub unit into the wall, ensuring the vertical foam gasket is placed under firm pressure*
 - Fill the Multi-hub unit with water, securing it in position
 - If the flood water flow is expected to be significantly high, a wedge can be used to fix the rotation of the multi-hub.
 - Please note: it is recommended that the modular unit placed next to a multi-hub (which is being used for wall connection or corner) is a 'pre-fill' unit type.



**Please ensure side gasket is pre-applied to the side of the multi-hub if being used for wall connection*

Disbanding Floodstop:

- Remove universal keys.
- Drain water from 'pre-fill' units by:
 - Tipping the units over carefully.
 - By unscrewing the water-release caps (0.9m system).
- Pack system away.

0.9m Additional Assembly Instructions – read in conjunction with the above:

Much like our 0.5m high system, modular units are placed down and then the weighted universal key must be 'fully' inserted to connect two or more units together. Due to the size and weight of the 0.9m universal key it has been split into two components - the upper and lower key. The lower key must be fully inserted first, and then the upper key is fitted upon the lower key's crest.



(Above) Upper key with hook handles

Due to H&S lifting regulations, the 0.9m Floodstop system requires two or more persons to assemble a barrier. Both the upper and lower key component requires two persons for handling – one hook handle per person, per key.



- Insert the lower key first.

Some force will be required, the simplest method is to use a sledge hammer to **lightly** tap the lower key into position. Do this before inserting the upper key. This is detailed in the 2nd youtube link on the next page.



- Insert the upper key. Please ensure the upper key is fully pushed down to ensure the lower key base is in firm contact with the ground.

- Example insertion video can be viewed via this link:

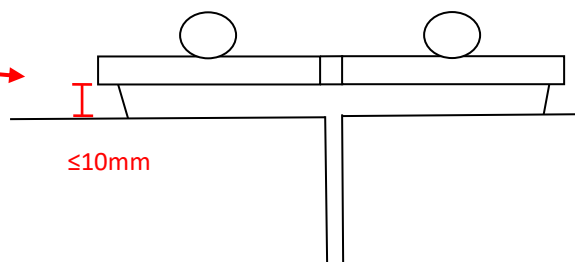
<https://youtu.be/t-zJruZ9XA8>

Or this option:

<https://youtu.be/3pkzr70LpoA>



- To ensure the upper key is fully inserted please ensure this dimension is below 10mm.



- When removing the lower key for disbandment – for assistance you can use a lever in conjunction with the hook handles to remove with ease.

- Example disbandment a video can be viewed via this link:

<https://youtu.be/9oARqqALYpE>

Packing/Storing Guidelines:

If your Floodstop barrier is not in use, and is not left assembled/deployed, we advise that the Universal Keys be covered well and stored inside. This is so the foam gasket can dry out between uses. If the keys are being stacked please locate thick cardboard between each layer to prevent gasket damage.



(Above) UK's stored, cardboard between layers & 10-metres of 0.5m Floodstop stored on a pallet.

Modular units should be stored inside so they can dry out between deployments.

This keeps will keep your system in good quality, removes prying hands and keeps debris away. You and your team can then be confident that when it is deployed in action everything will be as it should be.

Notes:

- If the wall or ground surface is not adequately flat (i.e. where Floodstop's foam gaskets are in contact) the seepage rate may vary - it is recommended to have a small pump on hand to pump away excessive leakage if required. The system is not recommended for use on gravel or polished surfaces.
- Ledges on the back of 0.5m Floodstop units can be used to apply further ballast.
- Depending on how the system has been assembled (terrain/number of pre-fill units/velocity of water) when the flood waters reach approx 75-80% of the flood barrier height negative buoyancy will start to begin. This may cause the system to slide. There are two ways to assist in counteracting this:
 1. Locating individual pre-filled (with water) Floodstop units behind the deployed barrier at a spacing of approximately every 3-4 metres.
 2. Applying more ballast (such as sandbags and sand) on/in the system.