flexible build system

WHAM BAM

Thank you for purchasing a Wham Bam Flexible Build System!

You are going to love this system!

Support QR link:



Included in the Flexible Build System Kit:

- 1 Flexi Plate Spring Steel Flexi Build Plate
- 1 PEX Build Surface or (PC with Ø115 kits) Sheet Build Surface backed with 3M Adhesive
- 1 Magnetic Base High Temp Resistant Flexible Magnetic Sheet backed with 3M Adhesive

Included in the Double Wham Kit:

- 2 Flexi Plate Spring Steel Flexi Build Plate
- 2 PEX Build Surface or (PC with Ø115 kits) Sheet Build Surface backed with 3M Adhesive
- **1 Magnetic Base** High Temp Resistant Flexible Magnetic Sheet backed with 3M Adhesive

Use:

You may have to heat your bed higher than previous temperatures, do a bit of testing to find your best bed temps with PEX. Our **PEX Build Surface** is specially formulated to resist much higher temps than any PC build surface. It has great physical bond to the parts without them ever melting into the surface. After printing you can lift the **Flexi Plate** by the handles and remove and set somewhere to cool.

- * Attention: the build surface may be very hot, so handle with caution to avoid burning your hands*
- * Once both Flexi Plate and parts are completely cool just bend the **Flexi Plate** on one axis, then on the other. Large parts should just pop right off. Smaller parts may need a bit more bending or slight help with a spatula. Never dig into the surface if you can help it.*

Maintenance:

Make sure your **Magnetic Base** stays free of debris and especially metal scraps. Keep the bottom of your build plates clean.

After every print we suggest to wipe with isopropyl alcohol and fresh paper towel, or even better quickly clean with 000 Steel Wool and alcohol and paper towel before reusing.

Should the PEX ever lose its grip, use some Acetone and steel wool to remove any residue that may have permeated the PEX top layer.

Support and Help:

Should you have any issues please refer to our installation guide, FAQ's, and additional support information on our website: www.WhamBamSystems.com

Installation: See other side of this sheet.

Installation QR link:



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Mounting Instructions:

<u>Before you install any parts, please do a practice run,</u> by placing components in place without removing 3M backing to see if everything aligns correctly and that you understand best order of assembly.

- 1. Remove any prior plastic build surfaces from your heated bed, and clean well to remove all residue, dirt or dust. Use acetone or alcohol to ensure it is completely clean. You may install Magnetic Base onto the Aluminum Heated Bed, onto a Glass Plate, or anything which is very flat and has stable dimension.
- 2. Your bed surface should be completely clean, smooth and flat. Check flatness by using a good quality steel ruler on edge and lay it in every direction against bed with eyes at the same level as the top of the surface and see if there are any gaps between ruler and heated bed.
- 3. If no gaps proceed to step 4. If there are any gaps or a bow, you may want to either try to bend your bed (if aluminum) gently back over your knee, use some aluminum strips as shims, or use a flat glass (floated glass or mirror) or rectified aluminum plate above your heated bed to have a level surface to mount your Magnet to.
- 4. Once your bed is flat and clean or once you have shimmed to perfection, it's time to apply your Magnetic Base. First test fit to make sure it is a good match to your plate, it is easy to cut with a cutter knife if needed. Then peel back a 1" or 20mm strip of the paper backing from the adhesive being very careful not to attract dust or dirt to the glued surface. Keep the whole Magnetic Base elevated above the heated bed and only touch the far back side to line it up with the bed, then while keeping the side near you elevated begin to push down in the center rear while slowly working the Magnetic Base down against the heated bed. Pull the backing paper as you wipe from center outward. Continue working from back toward front and pushing from center and spreading outward till the whole sheet is down. Burnish down with a bit of pressure, you can put a sheet of paper on top and rub it hard. It is best practice to allow the 3M bond to cure for 72 hours for maximum adhesion, but 24 hours gets you about 90% of ultimate adhesion.
- 5. Now it's time to mount your WB Build Surface to the WB Flexi Plate, clean the WB Flexi Plate with alcohol and paper towel till there is no grease or dirt on the surface. Work in a clean area on a clean work surface. Begin by peeling just 1" or 20mm of the backing paper back from the WB Build Surface on one edge. Apply this edge carefully to the rear edge of the WB Flexi Plate, working hard to get the alignment correct. Then with one hand on top of the WB Build Surface in center and one hand under it holding the protective paper, slowly begin to pull the protective paper back toward you and spread pressure with top hand from center outward, move at about 1/2" at a time to ensure there are no air bubbles. Continue this process slowly and carefully until it is completely applied. If there are any air bubbles use a credit card to slowly coerce them out toward the nearest corner.
- <u>REMOVE protective film from the top of the PEX Build Surface (there is none on PEI nor PC)</u>. Prepare the PEX Build Surface sheet surface using 000 steel wool and a bit of isopropyl alcohol (common high percentage rubbing alcohol from your pharmacy is fine). You do not need to use steel wool on PC Build Surface. Then clean the surface with fresh paper towel and alcohol.
- 7. You are ready lay the WB Flexi Plate on top of the WB Magnetic Base, level, and begin printing!

Suggested Temperatures and Settings:				
Build Surface	Filament	Bed Temp °C	Hot End °C	Special Instructions
PEX	PLA	70	190-210	squish first layer half height
PEX	PETG	70	240-250	very little squish first layer
PEX	ABS	110-130	230-250	average squish first layer
PEI PEI PEI	PLA PETG ABS	60 60 100-120	190-210 240-250 230-250	average squish first layer may want to use glue stick as barrier may want to use glue stick as barrier
PC PC	PLA PETG	50 50	190-210 240-250	very little squish first layer may want to use glue stick as barrier

Wham Bam thanks you man!!!