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# **PrintBite Instructions**

### PrintBite+ is as easy as...

- Peel Pull backing paper back about 1/3rd
- Stick Line up with edge of bed and apply
- Prime Heatsoak to cure adhesive (acetone clean BEFORE heatsoak)
- **Print** Clean and print

#### Installation

Apply to suitable glass/mirror (polished edges to avoid cracking), machined ali plate, or aluminium heaters. Caution: Do not apply directly to PCB heaters

- 1. Clean the glass thoroughly. Make sure glass and work area is dust free.
- 2. Peel back some of the white backing paper (roughly 1/4 to 1/3 of sheet)
- 3. Line up the edge of the PrintBite surface with the edge of your bed material and rub down firmly working from one edge to the other to avoid trapped air.
- 4. Pull the backing paper off some more, repeat as above until you have worked across the whole surface.
- 5. Clean the surface with kitchen towel lightly damped with acetone to remove fingerprints
- 6. Heat cycle the bed to 110c for one hour with a damp cloth placed on top, allow to cool, and repeat. The damp cloth will ensure a full heat soak to cure and harden the adhesive.

Your PrintBite is now ready for use.

## **Usage and Tips**

NEVER use isopropyl alcohol to clean PrintBite – it leaves a residue

Always use lab or medical grade acetone. Do NOT use nail polish remover as it contains oils.

Use standard bed temps or +5c / +10c depending on your machine and filament

Refer to attached temp guide sheet for hot end temperatures.

Tips: You will need to do some test prints to dial in your settings. Ensure you have reliable Z height calibration and adjustability. For your first prints, choose simple objects to get dialled in.

Use a slightly higher Z zero height as filament does not need to be squashed into the surface. If adhesion is poor, increase temps slightly, and then reduce your Z axis zero height by 50 microns and try again.

Ideally use a bottom layer print speed of 30mms. When you are dialled in and depending on the filament you can speed this up significantly with some filaments.

You should not need to use Brims for adhesion, however for larger parts printed in certain lower quality ABS that are not "print friendly" (ie sharp corners or step overhangs at corners) a small brim of 5 lines may prove helpful to avoid edge lift.



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Alternatively you can also use a skirt of 5 lines, with a distance from object set to 0.5mm which will give you an equivalent brim like assistance that will maintain heat in the surface around the printed part, without being attached to the part. This will avoid having to post process the brim removal.

Note it is important to achieve a "full melt" of the material coming out of the nozzle, and so increased nozzle temps on the bottom layer can make a big difference. For some users it may be required to print with a hot bottom layer, and then reduce nozzle temperature for second layer onwards.

Avoid touching print surface with fingers where possible. With the exception of flexible filaments, printed parts will self release once the bed has cooled off allowing them to picked up off the bed as if they were placed there.

If you find Prints don't self release, you may want to increase your Z zero height adjustment. If you hear a cracking sound during cool down, this is the part releasing from the bed and is perfectly normal.

#### Flexible materials

Print flexible onto a cold bed with an increased Z zero height. These can then easily peel off the surface when cold.

DO NOT squash flexible filaments into the bed or use high bed temps. If you have poor adhesion with a flexible filament, add +10c bed temp and try again.

WARNING: Never run your printer unattended and ensure suitable power cabling is used throughout your machine.

#### Cleaning

We recommend use of disposable kitchen towel slightly dampened with a soapy solution while the bed is cold. Wipe clean, and then repeat with fresh kitchen towel as a secondary wipe. A non smearing window cleaner such as Windex can also be used.

Do not use Isopropyl Alcohol, Methylated Spirit, Benzine based products, Brake Cleaner, vinegar based window cleaners or other harsh industrial cleaners as these will reduce adhesion and may permanently damage the surface.

# **Compatible Materials**

We have tested an extensive range of materials on PrintBite alongside our dedicated filament supplier who has also verified our results. Please see table overleaf for printing and temperature guidelines.



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Filament	Brand	Bed Temp	Extrusion Temp	Notes / Bottom Layer Soeed
PLA	Generic	60-65	210	Standard PLA – 40mms
ABS	Various	80-110	245	Slow bottom layer – 20/30mms
PET/PETG	Generic	60-85	220-225	Standard PETG – 30/40mms
Bridge	Taulman	45-65	250	Must be dried – 30mms
Nylon 618	Taulman	80 - 110	255-265	Must be dried – 30mms
Nylon 645	Taulman	70 - 110	260-270	Must be dried – 30mms
Filastic	BotFeeder	Cold +10c	230	Peel off when print cold - 30/40mms
PC-Plus	Polymaker	110 - 120	260	Allow to fully cool – 30mms
Laybrick	Laywoo-3D	40 – 60	190	30/40mms
Laywood	Laywoo-3D	50 - 60	200	30/40mms
Conductive PLA		50 - 60	195	Run like normal PLA
PVA		50	185	30mms
HIPS	ReprapperTech	80 - 100	230/235	Run like ABS
Bronzefill	Colorfab	60 - 65	195/205	30mms
Iron PLA	ProtoPasta	60 - 65	200/205	30mms
Steel PLA	ProtoPasta	60 - 65	205/210	30mms
Bismuth ABS	Bismuth	95 - 110	240/245	
Gellay	Porrolay	55	210	
Flexfill	Filamentum	Cold +10c	210	
PLA	Protopasta	55	205/210	Prints nicely – 30/40mms
NinjaFlex	NinjaFlex	Cold +10c	190/200	Cold Bed - High Z Height
FilaFlex	Recreus	Cold +10c	195/205	Cold Bed - High Z Height
SemiFlex	NinjaFlex	Cold +10c	200/210	Cold Bed - High Z Height
ASA	Filamentum	70 - 100	250/260	