3D FilaPrint Filament Guide

Customer live guide - complete with photos and printer settings

What will you print today
Why this guide?

With the multitude of printers on the market and the next generation of printers on the horizon, we wanted to create a "live" guide that offers our existing and new customers the opportunity to see and read how our filaments perform. What settings worked well, how successful prints were created and by whom.

There are a number of reasons why you may not achieve the perfect print when you first start on the road to 3D desktop printing, as different filaments require different settings. Sometimes what works perfectly well on one 3D printer may well need some fine tuning or flippin' great adjustments to work on another! In addition, information on how to 3D print is becoming more prevalent on the internet. You may have read one piece on one site that contradicted what was discussed on another. This guide should be used to find out what has worked and how, using our filaments, by the people who 3D print with them and that is you.

We are hoping that this guide may give you a head start if you are a beginner to 3D or some useful additional information if you are a seasoned "printerist", trying out a new filament.

The guide will be compiled using actual photos and information provided by 3D printer enthusiasts like yourself. We will be adding more content as time goes by, as long as you keep sending in your photos and settings, we will keep updating it. During these early stages of its creation this guide may well be updated daily.

Just click on any of the filament types or submitted colours in the Table of Contents and it will take you to a page where hopefully we have been able to include some real world pictures of 3D prints and their settings, ones that you may even have created yourself!

Please be patient with us, as this is just the beginning of our own 3D printer information journey, so there may not be that many prints to look at. However you can change that right now, if you found this guide useful, then why not upload your own successful 3D print and share it with us. Just provide a clear photo with a few settings and enter the information on this page http://dfilaprint.com/filament-guide-submission-page/. In addition we are also becoming aware of all the possibilities and uses for 3D desktop printing. We are amazed on a weekly basis for what 3D printing is being used for, so if you want to advertise your website to all the other enthusiasts, then include a web address on the submission page.

If you do submit a successful print we will give you 100 3D FilaPrint loyalty points towards your next purchase from our shop.

A special thanks goes to Richard Home of RichRap who kindly agreed for 3D FilaPrint to use his uniquely created images and text for the majority of the coloured nylon prints that you will see throughout the guide and for his knowledge and deep insight into the world of 3D printing. Using Richards words, laying a good foundation is the cornerstone of achieving a great print. There is no better place to start than here, Extruder Calibration. 3D printer calibration and hot-end PID control loop settings are no doubt two of the most important aspects of machine maintenance, if you are to achieve a successful, quality print.

For Tom at Tauman3D for explaining the correct way to use t-glase and how to achieve the best results for this excellent filament. View here.
We would also personally like to thank Simon of Reprapper who is at the Hot End of the filament cycle, for his commitment to quality of product, professional service and attention to detail.

Plus a huge Thank You to all of you who have submitted a print.

3D FilaPrint

What will you print today

To make an entry into the guide..
http://3dfilaprint.com/filament-guide-submission-page/

Please note this is just a draft version
Final versions will be registered and watermark free!
We will also be adding a link to all the projects that we have downloaded from Thingiverse.com
# Table of Contents

Recently added prints ................................................................. 5
ABS 1.75mm ............................................................................. 7
  Blue Green to Yellow Green ............................................. 8
  Blue & White colours used ................................................ 9
  Black .................................................................................. 10
  White ................................................................................ 11
  Yellow ............................................................................... 12
  Orange ............................................................................... 13
  Red ................................................................................... 14
  Blue .................................................................................. 15
  Silver ............................................................................... 16
  Transparent ........................................................................ 17
  Purple ............................................................................... 18
ABS 3mm ................................................................................ 19
  Orange ............................................................................... 20
PLA 1.75mm ........................................................................... 21
  Red ................................................................................... 22
  Glow Green ................................................................. 23
  Fluorescent Blue ........................................................ 24
  Glow Blue ................................................................. 25
  Fluorescent Green .................................................... 26
  White ............................................................................... 27
  Christmas Green ....................................................... 28
  Black ............................................................................... 29
  Purple ............................................................................... 30
  Yellow ............................................................................... 31
  Wood Colour ........................................................... 32
  Gold .................................................................................. 33
  Coffee ............................................................................... 34
  Silver ............................................................................... 36
PLA 3mm ................................................................................ 37
  White ............................................................................... 38
  Fluorescent Yellow ................................................... 39
  Red .................................................................................. 40
  Gold .................................................................................. 41
Conductive .............................................................................. 42
Taulman 3D Filaments ........................................................... 43
  Nylon 618 1.75mm ...................................................... 44
  Nylon 618 3mm ........................................................ 45
  Nylon 645 1.75mm ...................................................... 46
  t-glase 1.75mm .......................................................... 47
  t-glase 3mm ..................................................................... 48
Orbi-Tech Filaments .............................................................. 49
  Bendlay 1.75mm .......................................................... 50
  Bendlay 3mm .............................................................. 51
  LayBrick 1.75mm ........................................................ 52
  LayBrick 3mm .............................................................. 53
  Laywoo D3 1.75mm ..................................................... 54
  Laywoo D3 3mm .......................................................... 55
New Prints

These are the latest projects that have been added to the guide, click on them to take you to their info page. You will need to click at the bottom of each photograph.
ABS 1.75mm

A sample of our filament - each ABS1.75mm colour will have a 3D FilaPrint test print as a guide.

Colours submitted using ABS 1.75mm:
- Blue Green to Yellow Green
- Blue & White
- Black
- White
Blue Green to Yellow Green

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings:

Kindly submitted by "billyboyclyde"
Using a: MakerBot Replicator 2 X
Settings: Extrusion 230c and 110c platform with Kapton Tape
Time to print: 48 mins each
Notes: All standard settings - but really needed 15% infill rather than the default 10%. The figures turn a yellow green by just body temperature alone!
Blue & White colours used

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Two colours used

Kindly submitted by "billyboyclyde"
Using a: MakerBot Replicator 2 X
Settings: Extrusion 230c and 110c platform with Kapton Tape
Time to print: Over a period of a week!
Notes: All standard settings
3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Lenscap holder

Kindly submitted by "billyboyclyde"
Using a: MakerBot Replicator 2 X
Settings: Extrusion 230c and 110c platform with Kapton Tape
Time to print: 38 minutes
Notes: All standard settings
3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Christ the Redeemer - printed to show university students how supports work

Kindly submitted by "billyboyclyde"
Using a: MakerBot Replicator 2 X
Settings: Extrusion 230c and 110c platform with Kapton Tape
Time to print: 1hr 40 mins
Notes: All standard settings - 20% infill used

Pictures and settings: Abraham Lincoln's Head - printed to show university students how supports work

Kindly submitted by "billyboyclyde"
Using a: MakerBot Replicator 2 X
Settings: Extrusion 230c and 110c platform with Kapton Tape
Time to print: 14hrs!
Notes: All standard settings - 30% infill used
Yellow

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings:

Kindly submitted by ""
Using a:
Settings:
Time to print:
Notes:
Pictures and settings:

Kindly submitted by " "
Using a:
Settings:
Time to print:
Notes:
Red

3D FilaPrint Colour Guide - Our colour prints

Above Our Red           Above Makerbot Red

Pictures and settings:

Kindly submitted by " "
Using a:
Settings:
Time to print:
Notes:
Blue

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings:

Kindly submitted by " "
Using a:
Settings:
Time to print:
Notes:
3D FilaPrint Colour Guide - Our colour prints

Pictures and settings:

Kindly submitted by ""
Using a:
Settings:
Time to print:
Notes:
3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Hands

Kindly submitted by "Billyboyclyde"
Website:
Using a: MakerbotReplicator 2X
Nozzle Size 0.4
Settings: Warm bed with Kapton tape 115c, extruder temp 225c
Extrusion Speed: 90 mm/s Travelling Speed: 180 mm/s
Time to print: 4 Hours 34 minutes
Notes: None:
Purple

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings:

Kindly submitted by ""
Using a:
Settings:
Time to print:
Notes:

Created with Dr.Explain
Unregistered version
ABS 3mm

A sample of our filament - each ABS 3mm colour will have a 3D FilaPrint test print as a guide.

Colours submitted using ABS 3mm:
Orange
Orange

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings:

Kindly submitted by "Paulo UK"
Website: [www.skyhook.tv](http://www.skyhook.tv)
Using a: Mendelmax 1.6 Hot End Type: J Head
Nozzle Size: 0.4
Settings: Hot glass bed 110c, Geared Bowden extruder temp 240c - other platform materials used (see notes)
Print Speed: 110 mm/s Travelling Speed: 150mm/s
Time to print: 1 Hour 34 minutes
Notes: Nice filament. I need to up the bed temp by 10 degrees from my normal ABS settings to stop some warping, but printed well after this and seemed to handle overhangs really well!! Also used purple UHU on glass bed for adhesion.
PLA 1.75mm

A sample of our filament - each PLA 1.75mm colour will have a 3D FilaPrint test print as a guide.

Colours submitted using PLA 1.75mm:
- Black
- Glow Green
- Fluorescent Blue
- Glow Blue
- Fluorescent Green
- White
- Christmas Green
- Red
- Purple
- Yellow
- Gold
- Coffee
- Silver
3D FilaPrint Colour Guide - Our colour prints

Red

Pictures and settings: 3D FilaPrint Sign
Kindly submitted by Neil
Using a: Not Supplied
Nozzle Size: Not Supplied
Settings: Cold default bed, Bowden extruder temp 196c
Print Speed: 61mm/sec
Time to print: Not Supplied
Notes: I would call the Red (An Orange / Red) when it's Printed - Just my own View :) But It prints very well & I could use this colour but I will call it Orange on my website.

Pictures and settings: Flower Pot
Kindly submitted by "Billyboyclyde"
Using a: Makerbot Replicator 2 X
Settings: 0.2 layer height, infill 10%, kapton tape on bed, bed temp 60, extruder 210
Time to print: just over 1 hour and 35 mins
Notes: None

Pictures and settings: Threaded Filament Dust Filter

Kindly submitted by "Steve Dodgson"
Website: [http://2print3d.com](http://2print3d.com)
Using a: Sumpod
X3D Hot end
Nozzle Size 0.5
Settings: Cold default bed with Blue Painters Tape, Bowden extruder temp 190c
Print Speed: 40 mm/s  Travelling Speed: 130mm/s
Time to print: 22 Minutes
Notes: None
Glow Green

3D FilaPrint Colour Guide

Pictures and settings: Yoda

Kindly submitted by "itsjackbeck"
Using a: RepRap Pro Huxley
Settings: 0.2 layer height, 40% infill, kapton tape on bed, bed temp 58, extruder temp 180
Time to print: 2 hours and 30 minutes
Notes: happy with the print, a fan may have helped when printing the ears but they printed much better than expected.
Fluorescent Blue

3D FilaPrint Colour Guide

Pictures and settings: RichRap Chains in Reprapper Trans PLA Stack

Kindly submitted by "Richard Horne (RichRap)"
Website: http://richrap.com/
Using a: 3DR Delta Printer
Nozzle Size: 0.4
Settings: Blue painters tape on cold bed, extruder temp 205
Time to print: 32 minutes
Notes: It is a collection of the Translucent colours. I needed to increase the extrusion temperature a little from the default of 192 Degrees C. Print speed was 180mm/Sec. Printed as a set of three parts in each colour, no retraction as the travel moves are 450mm/sec.
Pictures and settings: Vase

Kindly submitted by "billyboyclyde"
Using a: Makerbot Replicator 2 X
Settings: 0.2 layer height, 20% infill, kapton tape on bed, bed temp 60, extruder temp 210
Default extruder and speed settings on a standard print
Time to print: 4 hours and 14 minutes
Notes: One of the best prints that i have created, beautifully smooth print.
Fluorescent Green

3D FilaPrint Colour Guide

Pictures and settings: Squirly Vase

Kindly submitted by "billyboyclyde"
Using a: Makerbot Replicator 2 X
Settings: 0.2 layer height, 10% infill, kapton tape on bed, bed temp 60, extruder temp 210
Extruder speed 80mm  Travel speed 140mm
Time to print: 1 hours and 17 minutes
Notes: Set the shells for 3 rather than the standard 2. The print is very light and almost translucent.
3D FilaPrint Colour Guide

Pictures and settings: Bigigloo

Kindly submitted by "billyboyclyde"
Using a: Makerbot Replicator 2 X
Settings: 0.2 layer height, 15% infill, kapton tape on bed, bed temp 60, extruder temp 210
Default extruder and speed settings on a standard print
Time to print: 2 hours and 12 minutes
Notes: The stl fil was a very small size, increased the scale by 800%!
There was only a couple of loose strands under the entrance of the igloo and the hole at the top was not quite sealed (guess the inuits need room for the smoke to come out).
Christmas Green

3D FilaPrint Colour Guide

Pictures and settings: Garden Frog

Kindly submitted by "billyboyclyde"
Using a: Makerbot Replicator 2 X
Settings: 0.2 layer height, 10% infill, kapton tape on bed, bed temp 60, extruder temp 210
Default extruder and speed settings on a standard print
Time to print: 1 hours and 40 minutes
Notes: Was taken from a scanned image on Thingiverse. A slight separation of a couple of layers just underneath the chin (is it a chin on a frog)?, but otherwise a good print.
3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Owl

Kindly submitted by "itsjackbeck"
Using a: RepRap Pro Huxley
Settings: 0.2 layer height, infill 30%, kapton tape on bed, bed temp 58, extruder 180
Time to print: just over 3 hours (printed slowly for accuracy)
Notes: printed very well, a fan would have helped the print with overhangs.
Purple

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Flower Pot

Kindly submitted by "Billyboyclyde"
Using a: Makerbot Replicator 2 X
Shells: 2
Settings: 0.2 layer height, infill 10%, kapton tape on bed, bed temp 60, extruder 210
Standard print settings on Replicator 2 X
Time to print: just over 1 hour and 10 mins
Notes: Very clean print,
Yellow

3D FilaPrint Colour Guide

Pictures and settings: Vase

Kindly submitted by "Steve Dodgson"
Website: http://2print3d.com
Using a: Sumpod
X3D Hot end
Nozzle Size 0.5
Settings: Cold default bed with Kapton tape, Bowden extruder temp 190c
Print Speed: 40 mm/s  Travelling Speed: 130mm/s
Time to print: 3 Hours
Notes: None
Wood Colour

3D FilaPrint Colour Guide

Pictures and settings: Owls
Thingiverse: http://www.thingiverse.com/thing:132938

Kindly submitted by "Billyboyclyde"
Website:
Using a: MakerbotReplicator 2
Nozzle Size 0.4
Settings: Warm bed with Kapton tape 65c, extruder temp 195c - with raft
Extrusion Speed: 80 mm/s Travelling Speed: 190 mm/s
Time to print: 4 Hours 55 minutes
Notes: None
3D FilaPrint Colour Guide

Pictures and settings: Bottle opener
Thingiverse: http://www.thingiverse.com/thing:132632

Kindly submitted by "Steve Dodgson"
Website: http://2print3d.com
Using a: Sumpod
X3D Hot end
Nozzle Size 0.5
Settings: Cold default bed with Blue Painters Tape, Bowden extruder temp 190c
Print Speed: 50 mm/s  Travelling Speed: 130mm/s
Time to print: 25 Minutes
Notes: None
3D FilaPrint Colour Guide

Pictures and settings: Bottle opener
Kindly submitted by "Steve Dodgson"
Website: [http://2print3d.com](http://2print3d.com)
Using a: Sumpod
X3D Hot end
Nozzle Size 0.5
Settings: Cold default bed with Blue Painters Tape, Bowden extruder temp 190c
Print Speed: 40 mm/s  Travelling Speed: 130mm/s
Time to print: 30 Minutes
Notes: None
Silver

3D FilaPrint Colour Guide

Pictures and settings: Perfume bottle Yr9 school CAD exercise
Kindly submitted by wijabbey
Website: http://www.barkingabbeyeschool.co.uk/index.html
Using a: Replicator 2
Nozzle Size 0.4
Settings: Cold default bed, Bowden extruder temp 230c
Print Speed: None Given
Time to print: Lid 5 hours Body 7.5 hours
Notes: Support traces can affect the final finish. The preview option in Makerware helped choose the best orientation on the bed. This was very successful on the lid bed, the body support traces were extremely difficult to remove.
All settings were as default except that infill was reduced to 5% to help reduce material and time.
PLA 3mm

A sample of our filament - each PLA 3mm colour will have a 3D FilaPrint test print as a guide.

Colours submitted using PLA 3mm:
- White
- Red
- Fluorescent Yellow
- Gold
White

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Minions with expressions
http://www.thingiverse.com/make:54737

Kindly submitted by: Mark Handford
Website: http://www.cylindric.net
Using a: MakerFarm 8" Prusa i3  Geared Extruder  Hot End Type: J Head
Nozzle Size: 0.3
Settings: Hot glass bed 60c, Extruder temp 180c - other platform materials used N/A
Print Speed: 30 mm/s  Travelling Speed: 130mm/s
Time to print: 45 minutes
Notes: Not had any problems with the filament, no spitting or popping, and the size seems pretty consistent too.

Pictures and settings: White Thingy

Kindly submitted by "Paulo UK"
Website: www.skyhook.tv
Using a: Mendelmax 1.6  Geared Extruder  Hot End Type: J Head
Nozzle Size: 0.4
Settings: Hot glass bed 85c, Bowden extruder temp 200c - other platform materials used N/A
Print Speed: 110 mm/s  Travelling Speed: 155mm/s
Time to print: 40 minutes
Notes: None required
Fluorescent Yellow

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings:

Kindly submitted by "Paulo UK"
Website: www.skyhook.tv
Using a: Mendelmax 1.6  Hot End Type: J Head
Nozzle Size: 0.2
Settings: Hot glass bed 70c, Bowden extruder temp 185 - other platform materials used (see notes)
Print Speed: 110 mm/s  Travelling Speed: 150mm/s
Time to print: 6 minutes
Notes: I always forget to mention that i use Purlp UHU glue stick on the bed and it is far the best i have found for first layer extrusion. The neon yellow PLA by 3D FilaPrint is awesome. It prints beautifully and the colour is better and brighter after extrusion. I will upload a picture of a better model. NB: The gaps in the model pictured are down to my print settings rather than the PLA.
3D FilaPrint Colour Guide - Our colour prints

Above Our Red
Above Makerbot Red

Pictures and settings:

Kindly submitted by "Paulo UK"
Using a: Mendelmax 1.6
Nozzle Size: 0.4
Settings: Hot glass bed 70c, extruder temp 185 - other platform materials used
Time to print: 34 minutes
Notes: Good Colour, behaved very well on my default PLA settings. Colour slightly weakens after extrusion, but is still nice.
Gold

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Tealight Holder
Thingiverse: http://www.thingiverse.com/thing:104694

Kindly submitted by "Ivor O'Shea"
Website: http://numbersixreprap.blogspot.ie/2013/11/having-vase-phase-with-video.html
Using a: Mendel90
Nozzle Size: 0.4
Settings: Sliced in Slic3r using spiral Vase setting...2mm layer height / .5 width. Speed 40mm/sec
Time to print: Not submitted
Notes: Didnt take to clean glass. I had to increase the first layer temperature from 185c to 195c. I suspect i may have to coat the glass with PVA solution.
3D FilaPrint Colour Guide

Prints submitted using Conductive 1.75mm or 3mm:
Pictures and settings:
Kindly submitted by "someone"
Using a:
Settings:
Time to print:
Notes:
Taulman 3D Filaments

Prints submitted using Taulman 3D Filaments;

In addition to the print submissions that you may find here in the guide, there is also a superb Nylon Colouring blog that has been created by Richard Horne of RepRap. As Richard has been designing, building and using 3D printers since 2010. Taulman 3D believed that Richard was the man for the Nylon colouring job and boy they made the right decision, take a look at these .....then click here to read Richards blog (if you havent already :)

Nylon 618 1.75mm
Nylon 618 3mm
Nylon 645 1.75mm
t-glase 1.75mm
t-glase 3mm
Nylon 618 1.75mm

3D FilaPrint Colour Guide

Pictures and settings:

Kindly submitted by "billyboyclyde"
Using a: MakerBot Replicator 2 X
Settings: Extrusion 220c and 80c platform with Blue Painters Tape and a quick spray of Trésemme just before (30 seconds) the print started
Time to print: Just 20 minutes as the bottom started to curl, thought it may peel off the bed. Prematurely cancelled the print.
Notes:
Nylon 618 3mm

Pictures and settings:

Kindly submitted by "someone"
Using a:
Settings:
Time to print:
Notes:
Pictures and settings:

Kindly submitted by "someone"
Using a:
Settings:
Time to print:
Notes:
Pictures and settings: Wine Glass

Kindly submitted by "Billyboyclyde"
Website:
Using a: Makerbot Replicator 2 X
Nozzle Size: 0.4
Settings: Hot Kapton bed 55c, Extruder temp 212c - other platform materials used none
Print Speed: 90 mm/s  Travelling Speed: 150mm/s
Shells: 2
Infill:  15%
Time to print: 3 hours (i think, as i quickly noticed before i switched off)
Notes: It took a little while to get the right temperature first.  The sides are the glass are only one single pass wide, hence why it almost looks like glass.  Should have spent a bit more time levelling the bed exactly (had been using the printer quite a lot without re-levelling.  As the print rose higher, the inbalance became obvious and i was trying to adjust the platform whilst printing!  That is why you can see the imperfections in the print.
3D FilaPrint Colour Guide

Pictures and settings:

Kindly submitted by "someone"
Using a:
Settings:
Time to print:
Notes:
Orbi-Tech Filaments

A sample of our filament - each premium filament will have a 3D FilaPrint test print as a guide.

Prints submitted using Orbi-Tech Filaments

- Bendlay 1.75mm
- Benday 3mm
- LayBrick 1.75mm
- LayBrick 3mm
- Laywoo D3 1.75mm
- Laywoon D3 3mm
Bendlay 1.75mm

3D FilaPrint Colour Guide

Pictures and settings:

Kindly submitted by "billyboyclyde"
Using a: Makerbot Replicator 2X
Settings: Extrusion 240c - Platform - 110c with Kapton Tape
Time to print: 2 hours 40 minutes
Notes: No additional settings or equipment required. Just did not bend very much when printed. Was told that it needed to be less than 5mm thick to bend.
Bendlay 3mm

Pictures and settings:

Kindly submitted by "someone"
Using a:
Settings:
Time to print:
Notes:
LayBrick 1.75mm

3D FilaPrint Colour Guide

Pictures and settings: Unique Forms

Kindly submitted by "Matt Smith of http://uniqueforms.net"
Using a:
Settings:
Time to print:
Notes:

Created with Dr.Explain
Unregistered version
LayBrick 3mm

3D FilaPrint Colour Guide

Pictures and settings:

Kindly submitted by "someone"
Using a:
Settings:
Time to print:
Notes:

Created with Dr.Explain
Unregistered version
Laywoo D3 1.75mm

3D FilaPrint Colour Guide

Pictures and settings:

Kindly submitted by "someone"
Using a:
Settings:
Time to print:
Notes:

Created with Dr.Explain
Unregistered version
Laywoo D3 3mm

3D FilaPrint Colour Guide

Pictures and settings:

Kindly submitted by "someone"
Using a:
Settings:
Time to print:
Notes: