3D FilaPrint Filament Guide

Customer live guide - complete with photos and printer settings
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://3dfilaprint.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 Horne 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 Reprpper Tech 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.

What will you print today

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

You can download the interactive PDF guide here.
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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 to take you to the relevant project.
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
- Orange
- Transparent
- Purple
- Conductive
- Fluorescent Blue
- Pink
- Silver
- Purple to Pink Thermalchange
- Glow in The Dark Green
- Gold
- Wood Colour
- Green
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
Black

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

Pictures and settings: Aztec Chief
Kindly submitted by "Billyboyclyde"
Website:
Using a: WoW!
Nozzle Size 0.4
Settings: Hot bed with Kapton tape 100c, extruder temp 230c
Extrusion Speed: This was using the settings for fine print (maximum infill)
Time to print: None supplied
Notes: Found that having set the supports and fill in the UP! software to the minimum setting of 10% with the least amount of lines and fills, there was not a great deal of support to remove, which actually did come away easily. Still would like to work out how i can set the application for zero supports.
White

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

Pictures and settings: Stratum Vase 01
Thingiverse: Stratum vase 01

Kindly submitted by "billyboyclyde"
Using a: MakerBot Replicator 2 X
Settings: Extrusion 230c and 110c platform with Kapton Tape
Time to print: 6 hours (if I remember correctly)
Notes: All standard settings - 10% infill used. This was made in April 2013 and has travelled quite a bit since, demos, exhibitions etc. So it is not as white as it was when originally printed. Also made the mistake of not wiping the platform clean from using a coloured filament before this print, as you can see from the base of the vase.
Yellow

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings:

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

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Tibetan prayer wheel Christmas ball ornament

Kindly submitted by "Billyboyclyde"
Website:
Using a: Makerbot Replicator 2 X
Nozzle Size 0.4
Speed extruding 90 m/s Speed Travelling 150 m/s
Settings: Hot bed with Kapton tape 110c, extruder temp 230c
Time to print: 1 Hour 44 minutes
Notes: No support or raft, this is only the prayer wheel part of the thingiverse object. Only used 10% infill.

Pictures and settings: Utah Teapot

Kindly submitted by "Billyboyclyde"
Website:
Using a: Replicator 2X
Nozzle Size 0.4
Settings: Hot bed with Kapton tape 110c, extruder temp 230c
Extrusion Speed: All settings as default using makerware on a standard print
Time to print: 3 Hours 55 minutes
Notes: Should of done less than 10% infill as cannot now hold any tea! Slight straining under the handle of the teapot.
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:
3D FilaPrint Colour Guide - Our colour prints

Pictures and settings:

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

Blue
Transparent

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

Notes: Sampling a few of our colours on the WoW! 3D desktop printer, retail price of around £595, no wonder they call it the WoW!

Pictures and settings: Customizable Square Trays
Kindly submitted by "Billyboyclyde"
Website:
Using a: WoW! Based on the Up! 3D Desktop Printer
Nozzle Size 0.4
Settings: Hot bed with Kapton tape 95c, extruder temp 235c
Extrusion Speed: Using the UP! software, does not show speeds.
Time to print: 32 minutes, ran at normal settings, no raft, support set at 10%.

Notes: In addition to the raft I also wiped a thin sheen of acetone on the bed, just before printing. It stuck like glue for the duration of the print! This is one of a pair that I have printed for a set of bookends. They have been filled to about 80% to give them some weight, you can see the pink one here.

Pictures and settings: His and Her Owls
Kindly submitted by "Billyboyclyde"
Website:
Using a: WoW! Based on the Up! 3D Desktop Printer
Nozzle Size 0.4
Settings: Hot bed with Kapton tape 95c, extruder temp 235c
Extrusion Speed: Using the UP! software, does not show speeds.
Time to print: 7 hours 30 minutes, ran at normal settings, using a raft, support set at 10%. Used Tinkercad to create a back bookend plate then just checked them through Netfabb.

Notes: In addition to the raft I also wiped a thin sheen of acetone on the bed, just before printing. It stuck like glue for the duration of the print! This is one of a pair that I have printed for a set of bookends. They have been filled to about 80% to give them some weight, you can see the pink one here.
Pictures and settings: Mouse Wedge

Kindly submitted by "Billyboyclyde"

Website:
Using a: WoW! 3D Desktop printer

Nozzle Size 0.4
Settings: Hot bed with Kapton tape 110c, extruder temp 230c. UP!
software used.
Time to print: 2 Hour and 50 minutes ran at normal settings, no raft and
no supports. 30% infil.

Notes: Made sure i wiped the platform with acetone, as each of the layers took one step back to create
the wedge, so the first layer had to be a perfect stick! I used the mouse from http://www.thingiverse.com/
thing:61909 then uploaded it to Tinkercad and created the door wedge. Downloaded it as an stl file then ran it
through Netfabb and voila. You can make the wedge as high as is required.
Conductive

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Upside down vase
Thingiverse: http://www.thingiverse.com

Kindly submitted by "Billyboyclyde"
Website:
Using a: UP!
Nozzle Size 0.4
Settings: Hot bed with Kapton tape 95c, extruder temp 235c
Extrusion Speed: Using the UP! software, does not show speeds.
Time to print: 3 Hours 22minutes
Notes: This was printed on a raft and then turned upside down as it resembled a rocket launcher pad, dont know why it just seemed the right thing to do. The print was used to test a new batch of 1.75mm conductive filament.
Flourescent Blue

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Customizable Square Trays
Thingiverse: http://www.thingiverse.com/thing:43406

Kindly submitted by "Billyboyclyde"
Website:
Using a: WoW! Based on the Up! 3D Desktop Printer
Nozzle Size 0.4
Settings: Hot bed with Kapton tape 95c, extruder temp 235c
Extrusion Speed: Using the UP! software, does not show speeds.
Time to print: 32 minutes, ran at normal settings, no raft, support set at 10%.

Notes: Sampling a few of our colours on the WoW! 3D desktop printer, retail price of around £595, no wonder they call it the WoW!

Pictures and settings: Romulan Warbird
Thingiverse: http://www.thingiverse.com/make:58121

Kindly submitted by "Billyboyclyde"
Website:
Using a: Replicator 2X
Nozzle Size 0.4
Settings: Hot bed with Kapton tape 110c, extruder temp 240c
Extrusion Speed: Default speeds using the FINE settings in the latest MakerWare with updated firmware, no support (apart from wingtips) and no raft. Infill set at 20% - 100% infill on wingtips
Time to print: Not sure as printed in three parts over two days - 2.5 hours per side.
Notes: This model was scaled to 125%, the detail then started to come through. Very, very thin layer of acetone and ABS slurry (just a wipe with a lint free cloth).
Pink

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: His and Her Owls
Thingiverse: http://www.thingiverse.com/thing:18879

Kindly submitted by "Billyboyclyde"
Website:
Using a: WoW! Based on the Up! 3D Desktop Printer
Nozzle Size 0.4
Settings: Hot bed with Kapton tape 95c, extruder temp 235c
Extrusion Speed: Using the UP! software, does not show speeds.
Time to print: 7 hours 30 minutes, ran at normal settings, using a raft,
support set at 10%. Used Tinkercad to create a back bookend plate then
just checked them through Netfabb.
Notes: In addition to the raft I also wiped a thin sheen of acetone on the bed, just before printing. It stuck like
glue for the duration of the print! This is one of a pair that i have printed for a set of bookends. They have been
filled to about 80% to give them some weight, you can see the purple one here.
Silver

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: 3D Extruder Parts

Kindly submitted by: Neil
Website: [www.3dprinterpunk.co.uk](http://www.3dprinterpunk.co.uk)
Settings: Extruder temp: 235 - Heated bed: 105
Print Speed: 45mm/s  Travelling Speed: 130mm/s
Time to print:
Notes: Printed on a glass bed using ABS juice.
Purple to Pink Thermochange

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Tibetan prayer wheel Christmas ball ornament

Kindly submitted by "Billyboyclyde"
Website:
Using a: WoW! Based on the Up! 3D Desktop Printer
Nozzle Size 0.4
Settings: Hot bed with Kapton tape 95c, extruder temp 245c
Extrusion Speed: Using the UP! software, does not show speeds.
Time to print: 5 hours!
Notes: This took so long as because the software even when set to 10% support, still used supports for the whole of the print, all around it, however they did remove easily. The print was also set to maximum fill, so it does feel quite heavy (like the real prayer wheels i guess).

Pictures and settings: Aztec Chief

Kindly submitted by "Billyboyclyde"
Website:
Using a: Makerbot Replicator 2 X
Nozzle Size 0.4
Settings: Hot bed with Kapton tape 110c, extruder temp 240c
Extrusion Speed: Default settings on standard print
Time to print: oops forgot to check!
Notes: I wanted to print this out to see how well the Rep 2X did after having two new extruders sent to us from Makerbot (after 800 hours printing both plungers were beginning to fail). All good now though! Although I had to raise the temp for our ABS to 240, normally default on 230. Also now wipe bed each time with a small lint free cloth, very slightly dampened with acetone and a rub of some old white abs "leftovers" (you can tell Christmas is coming).
The Chief was sat on the radiator, turning purple when the heater is off, bit like us in the office actually (bosses too mean to put the heating on :) Joking!

-
Glow in The Dark Green

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Romulan Warbird
Thingiverse: http://www.thingiverse.com/make:58121
Kindly submitted by "Billyboyclyde"
Website:
Using a: Replicator 2X
Nozzle Size 0.4
Settings: Hot bed with Kapton tape 110c, extruder temp 240c
Extrusion Speed: Default speeds using the FINE settings in the latest MakerWare with updated firmware, no support (apart from wingtips) and no raft. Infill set at at 20% - 100% infill on wingtips
Time to print: Not sure as printed in three parts over two days
Notes: Very, very thin layer of acetone and ABS slurry (just a wipe with a lint free cloth).
Gold

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Dentelle Pixels Lampshade

Layer by Layer: https://www.layerbylayer.com/product/6526EC4D980A593DCABFCCE75DB90C6E

Kindly submitted by "Billyboyclyde"

Website:

Using a: Makerbot Replicator 2X

Nozzle Size 0.4

Settings: Hot bed with Kapton tape 110c, extruder temp 230c

Extrusion Speed: Using the first edition of the makerware software

Time to print: 4.5 hours ran at normal settings, no raft and no supports.

Notes: This was one of the shades available on Layer by layer, unfortunately i cannot locate it. This was going to be used with the all american jelly jar for a unique lampsahde.
Wood Colour

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Mouse Wedge

Thingiverse: See notes below
Kindly submitted by "Billyboyclyde"
Website:
Using a: Makerbot Replicator 2X
Nozzle Size 0.4
Settings: Hot bed with Kapton tape 110c, extruder temp 230c. Makerware software used.
Extrusion Speed: Using the first edition of the makerware software
Time to print: 1 Hour and 45 minutes ran at normal settings, no raft and no supports. 15% infil.
Notes: Made sure i wiped the platfom with acetone, as each of the layers took one step back to create the wedge, so the first layer had to be a perfect stick! I used the mouse from http://www.thingiverse.com/thing:61909 then uploaded it to Tinkercad and created the door wedge. Downloaded it as an stl file then ran it through Netfabb and voila. You can make the wedge as high as is required.
Green

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Scanned Toad

Kindly submitted by "Billyboyclyde"
Website:
Using a: WoW! 3D Dekstop printer
Nozzle Size 0.4
Speed extruded: Used the default settings with maximum infil for a standard print, using the UP! software.
Settings: Hot bed with Kapton tape 95c, extruder temp 230c
Time to print: 1 Hour 44 minutes
Notes: No support or raft, this was printed from a scanned toad, so i think it has come out ok.

Pictures and settings: Headphone case

Kindly submitted by "Billyboyclyde"
Website:
Using a: WoW! 3D Dekstop printer
Nozzle Size 0.4
Speed extruded: Used the default settings with maximum infil for a standard print, using the UP! software.
Settings: Hot bed with Kapton tape 95c, extruder temp 230c
Time to print: 44 minutes
Notes: No support or raft, this printed pretty good for standard settings on the WoW! printer.
Galaxy Blue
3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Utah Teapot

Kindly submitted by "Billyboyclude"
Website:
Using a: Replicator 2X
Nozzle Size 0.4
Settings: Hot bed with Kapton tape 110c, extruder temp 230c
Extrusion Speed: All settings as default using makerware on a standard print
Time to print: 1 Hours 55minutes

Notes: This was printed on a raft just to get the effect of grandma's woven tablemat :)
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
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.
Pictures and settings: Android Logo and Dog Tag.
http://www.thingiverse.com/thing:130870

Kindly submitted by: Daniel Bull
Website: http://google.com/+DanielBull
Using a: Nop Head Mendel90 (RepRap)  Geared Extruder  Hot End Type: J Type
Nozzle Size: 0.4
Settings: Hot glass bed 55c, Bowden extruder temp 190c
Print Speed: 40 mm/s
Time to print: 1 hour and 15 minutes
Notes: The Android logo is a straight print in the glowing ABS filament, the dog tag was printed in two parts; a base with raised lettering in black PLA and a glowing panel with cutouts for the letters using the glow in the dark ABS. The two parts then snapped together to complete the tag.

It's worth pointing out I found the glow in the dark ABS needs to be printed quite cool, its almost the same as PLA temperatures rather than typical ABS filaments. This may be advantageous to some who have printers which are optimised for PLA.

When printing the ABS I used standard A4 plain paper on my bed for adhesion. If you use paper with ABS be careful as its possible that higher temperature ABS filaments may be too hot and burn the paper. I personally found the glow in the dark filament runs cold enough that paper works fine though.

(Bed temp actually set at 70c theres a 15c drop through the glass)
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

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 "Billyboyclude"
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
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
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

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.
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.
White

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).
3D FilaPrint Colour Guide

Christmas Green

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 seperation 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

Black

Pictures and settings: Owl
Kindly submitted by Jack Beck
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.

Pictures and settings: Watch
http://www.thingiverse.com/thing:30414
Kindly submitted by "itsjackbeck"
Website:http://www.emakershop.com/Seller=5000
Using a: RepRap Pro Huxley - Bowden Extruder - 0.3mm Nozzle
Settings: kapton tape on bed, bed temp 58, extruder 190
Print speed: 50mm/sec - Travelling speed 125mm/sec
Time to print: 39 minutes
Notes: Very easy to print all printed in one piece! I also used glow in the dark green filament for the face. The print turned out great and is comfortable to wear.
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

Pictures and settings: Owls
Kindly submitted by "Billyboyclyde"

Website:
Using a: MakerbotReplicator 2X
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
Gold

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: 50 mm/s  Travelling Speed: 130mm/s
Time to print: 25 Minutes

Notes: None
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 wijbabby
Website: [http://www.barkingabbeyschool.co.uk/index.html](http://www.barkingabbeyschool.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
- Glow Blue
- Black
Pictures and settings: PLA Cube Gears V3.
http://www.thingiverse.com/thing:130870

Kindly submitted by: Daniel Bull
Website: http://google.com/+DanielBull
Using a: Nop Head Mendel90 (RepRap) Geared Extruder Hot End
Type: J Type
Nozzle Size: 0.4
Settings: Hot glass bed 55c, Bowden extruder temp 195c
Print Speed: 40 mm/s
Time to print: 7 hours and 45 minutes
Notes: Sliced with KISSlicer using 3 loops and 25% circular fill (probably a bit overkill I would use less next time) and no supports/scaffolding.
Bed temp was set at 70c (there is a 15c drop through the glass so the real temp was 55c)
Diluted kids PVA applied to the glass with a brush and allowed to dry to a mist before printing.

Pictures and settings: Mendel90 spool brackets for 3DFilaPrint spools.
https://plus.google.com/+DanielBull/posts/PQiwxh7pd3x

Kindly submitted by: Daniel Bull
Website: http://google.com/+DanielBull
Using a: Nop Head Mendel90 (RepRap) Geared Extruder Hot End
Type: J Type
Nozzle Size: 0.4
Settings: Hot glass bed 55c, Bowden extruder temp 195c
Print Speed: 40 mm/s
Time to print: 9 hours and 20 minutes
Notes: These brackets are a direct swap-in replacement for the ones supplied by Nop Head in his Mendel90 kit. They change the spool holder so it fits the ~200mm x ~69mm spools supplied by 3DFilaPrint.

Each bracket is made up of a male and female half, similar to Nop Heads original design and you need two brackets in total, one for each side. There is also an extended dust trap which needs to be printed which is fitted to the left hand bracket as per Nop Head's original design. All the nuts, bolts and bearings can be reused from the original spool holders, no additional components are required and also the bolts go through the same holes so no additional drilling is required. The original spool brackets can be swapped back at any time.

If printing in PLA make sure you have a few loops so its strong, I used 3 loops personally on the 0.4mm head and have not had any issues with strength.
Time shown to print is in PLA with circular 25% infill, 0.2mm layer height and 3 loops.
I sliced with KISSlicer, and the time breakdown was 1:40 per female bracket, 2:20 per male bracket, 1:20 for the dust filter. Bed temperature was actually set at 70c (there is a 15 degree loss through the glass on a Nop Head Mendel90 so its really 55c). I also used diluted kids PVA for adhesion which I allow to dry to a mist before printing and wipe off with a damp cloth afterwards.

For more details please check my G+ feed here: https://plus.google.com/+DanielBull/posts/PQiwxh7pd3x
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.
Red

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

Kindly submitted by "Ivor O'Shea"
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: Didn't 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.
Glow Blue

3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Custom Christmas Deccy
Kindly submitted by "Paulo UK"
Website: www.skyhook.tv
Using a: Mendelmax 1.6  Hot End Type: J Head
Nozzle Size: 0.5
Settings: Hot glass bed 80c, Bowden extruder temp 185
Print Speed: 110 mm/s  Travelling Speed: 150mm/s
Time to print: 6 minutes
Notes: Not a great print by any means, but this not due to the filament. My x axis was slipping and I could only print very low profile prints for a while! Fixed Now.
3D FilaPrint Colour Guide - Our colour prints

Pictures and settings: Custom Battery Tray for Octo Copter
Kindly submitted by "Paulo UK"
Website: www.skyhook.tv
Using a: Mendelmax 1.6  Hot End Type: J Head
Nozzle Size: 0.5
Settings: Hot glass bed 80c, Bowden extruder temp 185
Print Speed: 110 mm/s  Travelling Speed: 150mm/s
Time to print: 50 minutes
Notes: None
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

Pictures and settings: Nylon Battery Case
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:
3D FilaPrint Colour Guide

Nylon 645 1.75mm

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.
t-glase 3mm

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

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](http://uniqueforms.net)

Using a:

Settings:

Time to print:

Notes:
LayBrick 3mm

Pictures and settings:

Kindly submitted by "someone"
Using a:
Settings:
Time to print:
Notes:
Laywoo D3 1.75mm

Pictures and settings:

Kindly submitted by "someone"
Using a:
Settings:
Time to print:
Notes:
Laywoo D3 3mm

Pictures and settings:

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

<TODO>: When new filaments have been successfully tested by our customers we will add them to this section.
NinjaFlex 3D FilaPrint Colour Guide
NinjaFlex White 1.75mm

Pictures and settings: Flexible Spanner
Kindly submitted by Deepak
Website: [http://3deeeeprinting.blogspot.co.uk/](http://3deeeeprinting.blogspot.co.uk/)
Using a:
Nozzle Size 0.4
Settings: See notes below
Print Speed: See notes below
Time to print: Not confirmed
Notes: this ninjaflex stuff is AMAZING… worked perfectly on the leapfrog creatr by setting the speed at 25mm/s constant… I have added my settings that work (based on existing filaflex settings). You can download my settings from here [http://3dfilaprint.com/customer-download-page/](http://3dfilaprint.com/customer-download-page/) You can download Slic3r from here [http://slic3r.org/download](http://slic3r.org/download)
Pictures and settings: Christmas Tree By Roman_Hegglin

Website: http://www.enlightx.co.uk/
Using a: Prusa I3 Single Plate
Hot end Type: E3D V4 Cold bed with Kapton Tape
Extrusion Temp: 240c
Nozzle Size 0.4
Print Speed: 40mm/sec  Travelling speed: 130mm/sec
Time to print: Approx 1 Hour
Notes: Printed at 0.15 Layerheight in Vase Mode. Trick with Ninjaflex is to print your object slow (40mm/sec) and also disable retraction. This is due to filament kinking up when moving to fast or reversing. File Location: http://www.thingiverse.com/thing:34851
Catastrophic Failures :(

Failed prints.

Before we start this section, we would like to bring to the discussion table, the question, how are we going to deal with the failed prints and the many metres of strands, rafts and sleeves that are being made to waste, whilst we are all enjoying this new technology, how should we tackle the waste that is created (perhaps when the new Filamaker is available, this may help to a degree). If you have any ideas of how we can get this topic going or you know of someone, a company or an organisation who is ready to take on this task. Then we would like you to submit your suggestion on the notes section of our Submission Page. For your information we have so far written to three local politicians, one industrial recycling company and not one of them showed any interest. Well, we think it is time they became interested!

In this exciting world of 3D Desktop printing we recognize not every single print is a success. We have been there when a print is at 90% and fails. Or when a project is left to print overnight only to wake up and choke on our cornflakes.

We wanted to add a section that pointed out some of the failures and what could be done to avoid them in the future. There are many reasons why a project fails to print, many of them avoidable, which we are going to highlight in this section.

In addition, maybe you have information that could be divulged to our readers to help them (and us) in the quest to achieve the perfect print. You can do this by uploading the information using our Submission Page and selecting the unsuccessful print option and input the reasons why it was not a success in the notes section at the bottom of the page.

Well here goes, time to re-live some of those cornflake moments.

Royal Crown
http://www.thingiverse.com/thing:80709

This was rescaled down to 50% of the original. Unfortunately as the crown grew higher a couple of the spines kept getting slightly clipped as they grew taller, by the left nozzle, as they only had a 10% infill after 3 hours of printing one of the spines snapped off at the base. When i removed the print (before completion) another two spines split off quite easily. Next time i would have a greater infill and make 100% certain that the bed and nozzles are absolutely levelled and aligned before attempting the print. What i did find was a very slight rub of acetone on the kapton bed meant no raft required and it stuck like glue.

Buddha
http://www.thingiverse.com/thing:95428

This buddha print was doing well on my UP! until i realised that i had not made sure that i had enough time to continue the print and had to abort halfway through!

Mouse Wedge - Home made
http://www.thingiverse.com/thing:95428

I should have ran this through Netfabb first! It was created by adding a mouse to a
wedge shape using Tinkercad and then just downloaded as an stl file. If I had ran it through Netfabb it would have highlighted a possible issue with the wedge shape. For when it was printing the raft did not run the whole length of the print as if it wasn't sitting on the platform completely.