



Geodesic Dome / Greenhouse



StorkNest_Projects

VIEW IN BROWSER

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Summary

Grow sustainably with a 3D printed geodesic greenhouse - efficient, precise, and ideal for optimal plant growth.



45.72 hrs



20 pcs



0.40 mm



0.80 mm



PET



1702 g



Prusa
MK3/S/S+

[Household](#) > [Outdoor & Garden](#)

Tags: [garden](#) [gardening](#) [greenhouse](#) [geodesic](#)
[geodesicdome](#) [geodesicconnectors](#) [geodesicgreenhouse](#)

Social Media:

- <https://linktr.ee/storknestprojects>

Components:

- about 100 threaded rods - M10
- about 300 nuts - M10
- about 10 wooden panel boards
- a roll of 30m x 1,5m greenhouse foil

- 7 rolls of greenhouse tape (8cm x 15m)

Updates:

- **06.04.2023** - upload of first design
- **10.04.2023** - added more photos
- **11.04.2023** - added gcode-files
- **18.04.2023** - upload of entrance parts & plywood holders
- **01.04.2023** - added photos

Don't miss out on exploring and creating other remixes of this geodesic greenhouse. Many fascinating modifications and accessories are available, making this structure even more versatile and functional.

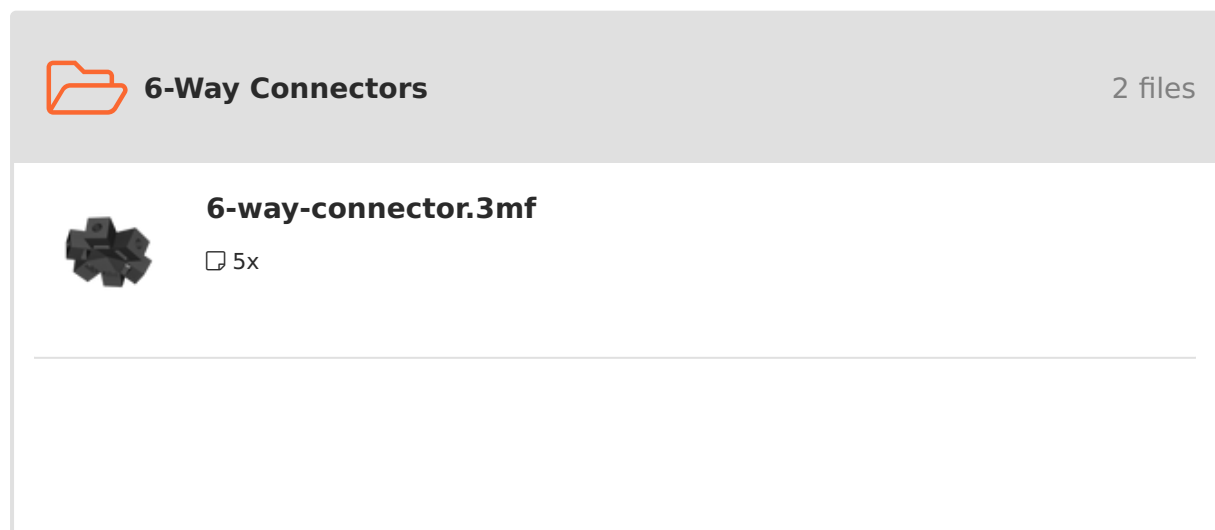
Design:

This geodesic greenhouse is constructed using threaded rods, which offer strength and stability. This construction method allows for precise and efficient assembly of the structure, ensuring that it is strong enough to withstand various weather conditions. One of the advantages of using threaded rods for the construction of a geodesic greenhouse is that they are relatively cheap and very less tools are needed to construct this geodesic structure. I decided to use insertable nuts because they offer secure connections, easy disassembly, and reassembly. So design changes or exchanges of components are relatively easy to manage.

Future Ideas:

- including options for vents, irrigation, etc. (planned for version 2.0)
- a slightly bigger greenhouse is planned (4 m diameter)

Model files





6-way-connector-2nd-level.3mf

📄 5x



5-Way Connectors

2 files



5-way-connector.3mf

📄 5x



5-way-connector-top-last-piece.3mf

📄 1x



Base Connectors

3 files



base-connector-abaa.3mf

📄 5x



base-connector-aaba.3mf

📄 4x



base-connector-aaba-end-piece.3mf

📄 1x



Bottom Connectors

2 files



bottom-connector.3mf



bottom-connector-end-piece.3mf



Entrance Connectors

10 files



base-connector-entrance-bottom-outside-1.3mf

📄 1x



base-connector-entrance-bottom-inside-2.3mf

📄 1x



base-connector-entrance-bottom-outside-1.3mf

📄 1x



base-connector-entrance-bottom-outside-2.3mf

📄 1x



entrance-base-connector-inside-1.3mf

📄 1x



entrance-base-connector-inside-2.3mf

📄 1x



entrance-base-connector-outside-1.3mf

1x



entrance-base-connector-outside-2.3mf

1x



entrance-top.3mf

1x



6-way-connector-entrance.3mf

1x



Plywood Holder

1 file



plywoodholder.3mf

Print files



6-Way Connectors

2 files



6-connector-1_08n_04mm_petg_mk3s_3h39m.gcode

PET 0.80 mm 0.40 mm 3.64 hrs 129 g Prusa MK3/S/S+

you need to print 5 of these



6-connector-2nd-stage_08n_04mm_petg_mk3s_3h54m.gcode

PET 0.80 mm 0.40 mm 3.90 hrs 135 g Prusa MK3/S/S+

you need to print 5 of these



5-Way Connectors

2 files



5-connector-top-last-piece_08n_04mm_petg_mk3s_3h32m.gcode

PET 0.80 mm 0.40 mm 3.54 hrs 121 g Prusa MK3/S/S+

you need to print 1 of these

5-connector_08n_04mm_petg_mk3s_3h31m.gcode

PET 0.80 mm 0.40 mm 3.31 hrs 120 g



Base Connectors

3 files



base-abaa-35_08n_04mm_petg_mk3s_2h25m.gcode

PET 0.80 mm 0.40 mm 2.41 hrs 90 g Prusa MK3/S/S+

you need to print 5 of these



base-aaba-35_08n_04mm_petg_mk3s_2h25m.gcode

PET 0.80 mm 0.40 mm 2.41 hrs 90 g Prusa MK3/S/S+

you need to print 4 of these



base-aaba-end-piece-35-1_08n_04mm_petg_mk3s_2h22m.gcode

PET 0.80 mm 0.40 mm 2.37 hrs 89 g Prusa MK3/S/S+

you need to print 1 of these



Bottom Connectors

2 files



base-bottom-end-piece-35-1_08n_04mm_petg_mk3s_1h42m.gcode

PET 0.80 mm 0.40 mm 1.71 hrs 68 g Prusa MK3/S/S+

you need to print 9 of these



base-bottom-35_08n_04mm_petg_mk3s_1h39m.gcode

PET 0.80 mm 0.40 mm 1.65 hrs 67 g Prusa MK3/S/S+

you need to print 1 of these



Entrance Connectors

10 files



doorway-base-connector-outside-1-1_08n_04mm_petg_mk... .gcode

PET 0.80 mm 0.40 mm 1.47 hrs 58 g Prusa MK3/S/S+



base-connector-bottom-1-1-1_08n_04mm_petg_mk3s_2h3m.gcode

PET 0.80 mm 0.40 mm 2.04 hrs 82 g Prusa MK3/S/S+



doorway-connector-bottom-1-1_08n_04mm_petg_mk3s_2h3m .gcode

PET 0.80 mm 0.40 mm 2.05 hrs 82 g Prusa MK3/S/S+



doorway-base-connector-inside-1_08n_04mm_petg_mk3s_... .gcode

PET 0.80 mm 0.40 mm 2.22 hrs 85 g Prusa MK3/S/S+
























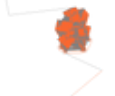






doorway-base-connector-inside-2_08n_04mm_petg_mk3s_... .gcode









PET 0.80 mm 0.40 mm 2.22 hrs 85 g Prusa MK3/S/S+



doorway-top_08n_04mm_petg_mk3s_1h30m.gcode

PET 0.80 mm 0.40 mm 1.50 hrs 57 g Prusa MK3/S/S+

	outside-bottom-connector-1.gcode	 PET	 0.80 mm	 0.40 mm	 1.71 hrs	 70 g	 Prusa MK3/S/S+
	outside-bottom-connector-2.gcode	 PET	 0.80 mm	 0.40 mm	 1.68 hrs	 69 g	 Prusa MK3/S/S+
	doorway-base-connector-outside-1_08n_04mm_petg_mk3s... .gcode	 PET	 0.80 mm	 0.40 mm	 1.47 hrs	 57 g	 Prusa MK3/S/S+
	6-connector-doorway-1_08n_04mm_petg_mk3s_3h28m.gcode	 PET	 0.80 mm	 0.40 mm	 3.47 hrs	 112 g	 Prusa MK3/S/S+

	Plywood Holder	1 file					
	plywoodholder_08n_04mm_petg_mk3s_57m.gcode	 PET	 0.80 mm	 0.40 mm	 0.95 hrs	 37 g	 Prusa MK3/S/S+

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