

19th IAA SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND
DEVELOPMENT (D3)

Interactive Presentations - 19th IAA SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE
EXPLORATION AND DEVELOPMENT (IP)

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MARS HOMESTEAD CONSTRUCTION GUIDEBOOK

Abstract

Your contributions are welcome to this open source web guidebook of Mars construction techniques. Help collect detailed descriptions of a variety of ways to live and build on Mars.

By contrast, many research papers only show one technology, primarily what the researcher was working on. They understandably do not give much information on alternatives, and can not give much detail on how their technology would fit into an overall settlement design.

There are also published plans for entire settlement designs, but most show the broad overall architecture while lacking details, due to limited page limits for publication, or limited time to design everything.

This Mars Homestead handbook will show multiple options in detail, for each aspect of building a Mars settlement. They will be cross indexed so that, for example, you can find multiple ways to start agriculture, or multiple options to produce oxygen, etc.

To be easy for you to edit, the handbook is organized as separate pages in a Wiki (WikiMedia web site), Each page covers one specific method of construction or other aspect. A coherent plan for a specific settlement can be made by stringing together multiple pages with an overall document on the sequence of construction and overview. Multiple settlement plans and variations can co-exist, using the same technology pages.

You can publish your own work, or help by gathering information from existing publications. Contact BMackenzie@alum.mit.edu