Geometry and Dimensions:
- Given required dimensions for the tray. The tray is to be made with pieces of wood that are half an inch by half an inch thick. These pieces then need to be formed into a tray with the dimensions of 18 inches by 36 inches.

Environmental conditions:
- Humidity in solar dryer box
- Heat from solar dryer box
  - Humidity and heat inside box will not affect the materials. Staples will not rust and the plastic should not melt.

Physical Properties:
- Plastic:
  - “Skid-resistance and high impact absorption. Net pattern allows thorough drainage, promoting rapid, fog-free drying; helps prevent bacteria growth. Resistant to food acids, grease, and detergents. Meets FDA regulations. Economically priced, Texliner is constructed of a firm, resilient plastic. Sold in foot intervals.”
- Staples:
  - “Designed to resist rust when used in high-moisture environments. These staples are made from durable 16-gauge stainless steel and feature a 3/8 in. crown size.”

Primary Requirements
Appropriate technology:
- Easy to manufacture
- Easy to maintain

Available Materials:
- Wood can be purchased at most stores
- Plastic mesh can be ordered online and shipped for cheap price

Affordable:
- One roll of plastic cost 2’x40’ cost $1.47
  - Only $.06 to produce a single sheet
- One pack of 1000 staples cost $11.27
  - Only $.70 to staple single tray

Ease of Maintenance:
- Plastic can easily be scraped clean and then washed down with water

Safety:
- Plastic mesh is FDA approved
- Stainless steel staples will not rust

Materials links:
Staples:
http://www.homedepot.com/p/Arrow-Fastener-T50-3-8-in-Crown-16-Gauge-Stainless-Steel-Staples-1000-Pack-506SS1/100553013

Plastic Mesh:
http://www.usplastic.com/catalog/item.aspx?sku=85258&gclid=CP-E1qvR-LkCFU-Z4AodKHAAIg