

What is the **real cost** of a **cotton module tarp**



Photo courtesy of The National Cotton Council of America

For more information:

National Cotton Council

"Just Build It: Seed-Cotton Storage & Handling in Modules"

<http://www.cotton.org/tech/quality/just-build-it.cfm>

"Just Tarp It"

<http://www.cotton.org/tech/quality/just-tarp-it.cfm>

Department of Biological and Agricultural Engineering, Texas A&M University, (979) 845-3931.

Funding for this brochure was provided by the Texas Department of Agriculture—Food and Fibers Research Grant Program. Research funding was provided by the Texas State Support Committee of Cotton Incorporated, the Texas Department of Agriculture—Food and Fibers Research Grant Program, The Cotton Foundation, and the Texas Agricultural Experiment Station.

Front cover photo courtesy of James Lyle.



Myth: Once seed cotton is stored in modules it is protected from loss.

Fact: Cotton in poorly built modules covered by worn tarps can lose up to \$650 in lint value per module during storage.

Myth: A tarp that stays on is good enough.

Fact: Tarps that leak can reduce ginning rates by 50 percent more.

Produced by Agricultural Communications,
The Texas A&M University System
Extension publications can be found on the Web at:
<http://tcebookstore.org>
Visit Texas Cooperative Extension at
<http://texasextension.tamu.edu>

Educational programs conducted by Texas Cooperative Extension serve people of all ages regardless of socioeconomic level, race, color, sex, religion, handicap or national origin.

Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture. Edward G. Smith, Director, Texas Cooperative Extension, The Texas A&M University System.
15M. New

Texas Cooperative
EXTENSION
The Texas A&M University System



Cotton that is not well protected from the elements loses quality and value as it waits to be ginned. The profit from a year's work and investment could be disappearing in poorly built modules under worn tarps.

At one Texas location, lint value was reduced \$400 per module when poor tarps were used. A poor module shape reduced the value an additional \$200. Gin turnout was reduced from 34 percent with well-built modules and good tarps to 26 percent with poorly built modules under poor tarps. Ginning rate was cut from 42 bales per hour (BPH) with good module shapes and good tarps to 19 BPH with both poor module shapes and poor tarps.

Producers and ginners can stop these revenue losses with just a few simple steps.

A good module looks like a bread loaf.

Producers—Building Modules

Half of all cotton modules are built incorrectly so that water ponds in depressions on top. If the tarp has pinholes that allow water to leak through, the cotton can be damaged. When building a module, the cotton should be tightly compacted, with more in the middle of the module so that the module is rounded both along the length and across the width. It should be shaped like a loaf of bread.

Effect of Module Shape and Tarp Condition on Turnout and Ginning Rate

	Turnout	Ginning rate (BPH)
Well built module Good tarp	34	42
Well built module Poor tarp	27	29
Poorly built module Good tarp	31	34
Poorly built module Poor tarp	26	19

Well built = Cotton harvested at less than 12 percent moisture content and tightly packed in a module with a rounded surface.

Good tarp = Less than three seasons of use and few pinholes.

Producers—Using Good Tarps

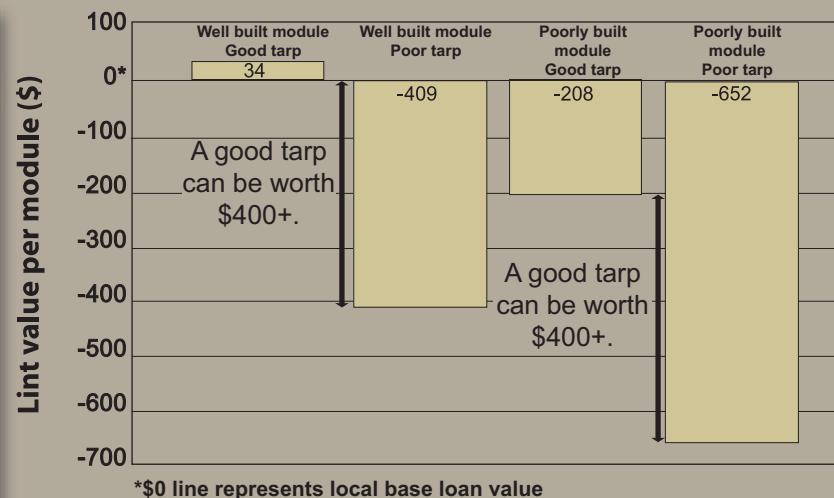
A tarp cannot do its job if it is worn out or has pinholes or tears. When receiving a load of tarps, the producer should inspect them before use and ask for replacements for any that are in poor condition. If it is necessary to add extra tie-downs to keep the tarp secured, put them through the existing grommets in the tarp. Do not put ties over the top of the module because this will wear out the tarp prematurely.

Ginners—Inspecting and Purchasing Tarps

After the ginning season, tarps should be cleaned and dried thoroughly, then inspected. Tarp condition is more important than age. Repair rips and tears and replace damaged straps, ropes, buckles or other fasteners. Only close inspection will reveal pinholes, thinned coatings and the breakdown of UV-light stabilizers—



Economic Impact of Module Shape and Tarp Condition



all of which can result in damaged cotton. Many tarp suppliers and other companies offer inspection and repair services.

Replace worn tarps that cannot be repaired. A new module tarp costs \$65 to \$120. This investment makes economic sense when compared to the possible losses from poor cotton quality and low ginning rates.

In laboratory tests, tarps constructed of woven poly, vinyl or film have been shown to repel water. Research at Texas A&M University has shown that vinyl and film tarps resist water penetration after significant exposure. The performance of woven poly tarps varied from good to poor water resistance with the same exposure. When buying new tarps, consider your climate. Tarps exposed to intense solar radiation (summer through early fall) or high wind will degrade more rapidly. Ask tarp manufacturers for data showing how their tarps perform over time.