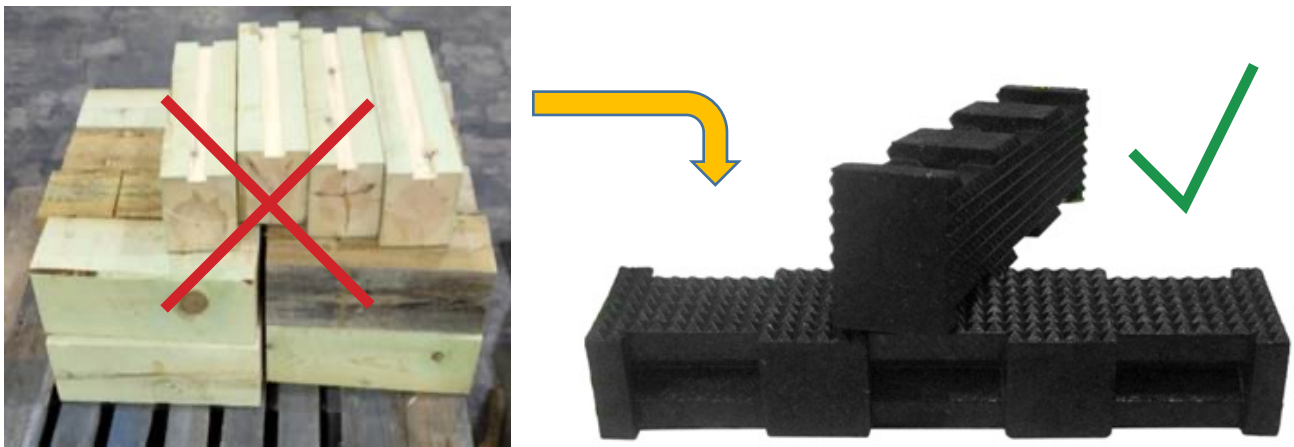


## APPLICATION CASE STUDY # 118

### RETURNABLE PACKAGING: Transportation plastic cribbing dunnage blocks



#### APPLICATION:

As the cost of lumber continues to skyrocket, most companies are looking for ways to cut costs on consumable transportation dunnage. Heavy use items such as wood cribbing and blocks for stacking or shipping are costly as an expendable - a better method is needed to make them cost effective.

#### PROBLEM:

Large wood dunnage blocks and 4 X 4's used in manufacturing can degrade overtime due to sun damage and water incursion. Repeated weather cycling can cause the blocking to become unsafe for operators. Short lifespan requires costly program replacements. Loads of up to 24,000 lbs per block can be challenging to support with other materials.

#### SOLUTION:

The PolyFlex Engineering Team can design a suitable stacking block that solves the problem of expendable wood dunnage. Each application is design-specific to the product and desired life cycle. The renewable plastic dunnage blocks are engineered for maximum weight distribution and stability while supplying a product that is light weight and easy on the operator.



**RETURN ON INVESTMENT EXAMPLE:**

PolyFlex Engineering will design a solution to maximize the load and stack-ability of the dunnage. The design will also allow water to dissipate eliminating the chance of a buildup and freeze defect.

Disposable - Annual Purchase		Returnable - One Time Investment	
Description	Amount	Description	Amount
6 X 6 X 18 Wood Cribbing stack Blocks:	6,800	6 X 6 X 18 Plastic Cribbing stack Blocks:	6,600
Estimated Cost each:	\$39.41	Estimated Cost each:	\$58.87
Investment Total (Annual):	\$267,988	Investment Total (One Time):	\$388,542
Return Freight (Annual):	NA	Return Freight (Annual):	\$16,400
<b>Total Cost x 5 Years</b>	<b>\$1,339,940</b>	<b>Total Cost x 5 Years</b>	<b>\$470,542</b>
Payback	0 Months	Payback	21.1 Months
Return On Investment (ROI)	0%	Return On Investment (ROI)	185%

\*Includes amortized tool

Each dunnage block configuration can be made unique to maximize product density and minimize material handling.

The PolyFlex advantage and cost savings available with renewable cribbing dunnage:

- Fully recyclable materials – no landfill of oily wood.
- Safe stacking without cracking, twist, or warpage.
- UV Protection prevents degradation from sun light.
- No special chemical treatments needed to prevent infestation of insects.
- Safety colors available / no paint to chip or wear.
- Stops product contamination from wood chips and debris.
- Fully washable and returnable.
- Fast Return on Investment through continued reuse.
- PolyFlex Products makes a system that works for you!

