

Shaping Efficiency:

How a precision-fit baffle bag kept clay shipments clean, stable, & cost efficient.



Creating Stability, Saving Space.

Although our customers original bags met weight requirements, their square, unstructured walls relaxed during filling and transport. The result was a large, outward bulge, that overhung the pallet, reduced stacking stability, and created excessive headspace once the kaolin clay settled. Loads required extra film and rework to secure, and the inconsistent silhouette detracted from the product's professional presentation.

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Client Industry:

Industrial Minerals

Location:

Southeast

Objective

A leading manufacturer of kaolin clay used across many industries faced inefficiencies in their packaging process. Standard FIBC bulk bags bulged significantly during filling, overhung the pallets, and left excessive headspace after the product settled.

Our goal was to design a bag that would fit the pallet footprint, maintain its shape during handling and transport, and reduce wasted space, all without sacrificing load capacity.



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"Switching to baffle bags was a game-changer. Our shipments now look cleaner, stack better, and save us money." -Buyer

Sculpting a Smarter Bag.

We introduced a baffle FIBC engineered to hold its shape from fill through final destination. By resizing the footprint to 40"×44"×60" and adding internal baffles, the bag's sidewalls remained straight, aligning cleanly with the pallet and minimizing overhang. The controlled geometry preserved volume while reducing headspace after settling—yielding safer stacks, cleaner aisles, and a more attractive, uniform package.

✓ Diagnosed the Root Cause

The oversized footprint and lack of internal structure caused the bags to push out during filling, creating unstable stacks and higher risk during transport from bulging beyond the pallet edges. Kaolin clay will also naturally compacts during transit, leaving unused space in the bag and creating an unattractive, inconsistent package.

✓ Identified a Solution

By resizing the bag and integrating internal baffles, we could keep the sides straight, match the pallet dimensions, and ensure better fill consistency. This would not only improve presentation but also enhance safety and maximize container space.

✓ Engineered a Smarter Bag

We replaced the 42"×42"×60" standard bag with a 40"×44"×60" baffle bag design:

- Baffles inside the bag prevented bulging and maintained a clean, rectangular shape.
- Optimized dimensions matched the pallet footprint with minimal overhang.
- Reduced headspace minimized wasted space after product settling, leading to a more compact, visually appealing load.

Overview

Shipping Stability, cost savings, and brand image are all huge factors to any organization. By creating better stability with a more uniform shape, we were able to engineer a more efficient container and pallet solution that lowered freight costs, all while providing a cleaner and more consistent package that enhanced customer perception of quality.



Key Benefits

- 01 Shipping Stability**
Reduced overhang on pallets for safer, more stable stacking.
- 02 Cost Savings**
Lowered transportation costs through better space utilization.
- 03 Better Appearance**
Improved package appearance for stronger brand presentation.

Interested in a Custom Solution?

If you're facing challenges with your packaging design or want to explore how our tailored solutions can protect your product and bottom line, we'd love to help. Contact us to learn more.

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