



BELUGA CONCERTINA FLOOD PREVENTION SYSTEM

The Beluga™ Bag Barrier is a unique flood control system that is ideal for protection of important property and infrastructure.

The Beluga bag barrier is a concertina style big bag system, consisting of an integrated heavy duty bag, divided into 5 distinct chambers, ready to receive sand or other aggregate or fill material.

Each individual compartment is incredibly strong and can hold over 5,000 lbs. of fill.

Beluga bags ship flat on pallets, ready to be opened, positioned and filled. Each bag is 15ft long, 3ft deep, and 40" high and replaces approximately 750 standard sandbags.

Beluga Barriers use roughly 1/2 the amount of sand required for an equivalent sandbag barrier and significantly less labor to position and fill.

Beluga Bag Barriers can be installed and filled by a small crew. When full, Beluga bags can be moved using traditional material handling equipment, or using a heavy duty spreader bar, for lifting a full 5-compartment version (BG5).

Oversized Beluga Bags Are Used For:

- ▶ Perimeter & Utilities Protection
- ▶ Levee Height Extension
- ▶ Water & Stream Diversion
- ▶ Blast Protection & Military Installations
- ▶ Secure Subway Systems
- ▶ Storm Surge Protection



Installs More Quickly

Beluga™ Bags install more quickly than traditional sandbags, because they can be placed and expanded quickly and filled in bulk versus small sandbags which must be filled and tied individually, bag by bag. This means that standard material handling equipment can be used to transport and fill Beluga's with sand.



Uses Less Sand

Beluga Barriers use approximately 50% less sand, because they provide the ability to gain height, without the need for a widened base that is 2x the height for typical sand bags stacked to 40" (the Beluga bag's height). Beluga also eliminates dead space associated with stacked sandbags.



Requires Less Labor

One Beluga Bag replaces roughly 750 sandbags and fill in bulk in about 15 minutes, there is significantly less labor, time and work to create an equivalent height and strength flood barrier. Two people can fill 15 traditional sandbags per hour. That's 50 hours to build an equivalent Beluga dike from traditional sandbags.



Costs Less

Beluga Barriers cost less to install, because they offer tremendous savings over traditional sandbags, due to a nearly 50% material savings and a greater than 50% labor savings.



BIG BAG BARRIERS FLOOD CONTROL

Specifications

Beluga™ Barriers can be used anywhere to rapidly deploy a barrier to prevent floods and rising waters.

- ▶ **Material:** Constructed using a durable 5.6oz, coated (impermeable) polypropylene fabric on 1 side & an uncoated 5.0oz (water permeable) fabric on the other sides (allowing slow water drainage).
- ▶ **Fabric:** 170 GSM Fabric / RIC Code 5 / SPI Code PP / 100% Polypropylene
- ▶ **Properties:** 2200 Hour UV Protection / Heavy Duty Lifting Straps
- ▶ **NAICS Code:** 314910
- ▶ **Bag Capacity:** Seams are double-stitched for added strength & durability. Bags have a capacity of 30 cubic-feet of sand (filled to the top) per section x 5 sections = 150 cubic feet of sand per 5-compartment bag.
 - ▶ 4,500lbs. SWL (Safe Working Load) weight capacity per section of bag.
 - ▶ 22,500lbs. SWL (Safe Working Load) weight capacity per 5-compartment bag.

Beluga (BG1) (Single Bag)



Single Beluga Bags are typically used for shorter runs or to terminate a run of larger Beluga Bags. They are also great FIBC bags for general use (factories, storage, etc). We recommend designing your system around the BG5 bag below and supplementing with BG1 as needed.

- ▶ 3ftL x 3ftW x 40"H
- ▶ Empty Weight: 2.5lbs.
- ▶ Filled Weight (Approx.): 2,630lbs. filled with dry sand

Beluga (BG5) (5-Compartment Bag)



- ▶ 15ftL x 3ftW x 40"H -- Incorporating 5 separate compartments each 36"L x 36"W x 40"H
- ▶ Empty Weight: 12lbs.
- ▶ Filled Weight (Approx.): 13,150lbs. filled with dry sand



**Note: Each Bag section includes 4ea. 2" x 10" double loop, heavy duty lifting straps for transport, or 20 lifting straps per compartment bag.*

