



The Eagles Novacare practice facility is a Universal Fabric Structure



Shipboard Cocoons: BIA designed the cocoons to protect deckside shipments from the elements

# Universal Fabric Structures offers Unique Building Alternatives

*What do a Native American tribe in Ontario, Canada, the Idaho Department of Energy and the sea-going John A Chapman have in common?*

They all have projects designed by Barry Isett & Associates for Universal Fabric Structures (UFS). A Quakertown, PA - based company, UFS provides alternative building structures to a broad international client base.

**BIA's project in Ontario, Canada houses an Indoor Ice Hockey Rink designed for the Chippewas of Georgina Island First Nation.** The Chippewas of Nawash First Nation (Cape Croker) is located on the Bruce Peninsula on the shore of Georgian Bay about an hour north of Toronto and is home to 740 community members.

**The John A. Chapman project involved creating 'shipboard cocoons' to provide protective housing for containerized military munitions.** The cocoons range in height from 20 feet to 28 feet and stretch the entire width of the deck with the frames anchored to the ship's deck.

**The Idaho Department of Energy is using a structure to cover a remediation site.**

Led by Ross Sotak, PE, BIA's Structural

engineering department has been working with Universal Fabric Structures in the design of tensioned membrane structures that can be quickly assembled on site while offering a high level of protection from the elements.

BIA's Berlin, MD Civil/Survey team is currently conducting a feasibility study for an indoor soccer facility outside of Maryland that would utilize Universal Fabric Structure technology to expand its capacity. With three indoor fields currently, they are considering the addition of a 110-foot by 220-foot structure to make a fourth indoor field available for team play. BIA's Structural department is also working with UFS to increase structural efficiencies for their Hercules product line: a structure with a 100-foot maximum span that can be adapted to a variety of uses.

Universal Fabric Structure technology can be engineered to provide environmental comfort for occupants through insulation, HVAC and electrical systems. They can be employed for the long or short term. Used extensively by the military and in the aviation, environmental, warehousing, entertainment and sports and recreation industries, these structures can be designed to be over 300 feet wide and be of "indefinite length" according to Jon Kirsch, Director of Sales & Marketing for UFS. "Our most unusual project was a 318-foot-wide by 380-foot long structure designed in an American flag theme for a three-day convention in Bakersfield, CA" said Jon. "But many of our

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customers look to UFS for solutions to their permanent building needs. Congregations have turned to us for cost-effective churches; the casino industry uses our structures for gaming purposes; the Philadelphia Eagles' practice facility at the NovaCare Center is a Universal Fabric Structure. UFS is ISO 9001:2000 certified. The frames hold a 25 year warranty; the high quality architectural fabric membrane is guaranteed for 12 to 15 years, but most systems have much longer useful lives. "We've been in business for over 26 years and our structures have withstood the test of time, even under the harshest environments," notes Jon. "Some say we 'over-engineer' our structures. While all of our structures are designed to meet or exceed local codes, we like to say that our structures are 'built to last.'" Over the past 18 months, Ross and the BIA team have supported UFS's engineering group and also provided background information to our sales team. It's been a great relationship."

Barry Isett & Associates, a multidiscipline engineering firm serves a broad cross section of clients. Barry Isett founded the firm in 1977 and today, our staff of over 100 professionals in 3 states has expanded our scope of services to include all land and building engineering services. It is our people who make the difference in finding creative and cost-effective solutions for the array of challenges that any project can present.

Questions and comments about Barry Isett & Associate's BIA Bulletin are welcome. Please contact Francee Fuller at 610.398.0904 or [ffuller@barryisett.com](mailto:ffuller@barryisett.com)



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