VAPROSHIELD®
Breathable Membrane System for Roofs & Walls

PROJECT PROFILE | NOAA GLOBAL CLIMATE CHANGE RESEARCH FACILITY – BARROW ALASKA

PROJECT MANAGER

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PRODUCT(S)

WrapShield®
VaproTape Double-Sided

PROJECT DESCRIPTION

Phase I, a 20,000 gross square foot Research/Education facility scheduled to open in 2007, includes research laboratories, administrative offices, information technology (IT) spaces, and building support.

Approximately 16,140 square feet of material encloses the structural steel building erected on a steel pile foundation. The exterior walls are 18’ 6” high and set 6’ above ground level. The enclosed stair tower extends 30’ above ground level. The exterior framing is 16 gauge metal studs spaced 2’ on center.

WrapShield was selected for two key reasons: the highest permeable air barrier available and its ease of installation and durability. Mark Williams, project superintendent listed a few facts that made working with WrapShield ideal.

- WrapShield was very easy to install with 2 men in a forklift basket.
- Required the minimum amount of fasteners. Used self drilling screws with a roofing washer and spaced them 4’ to 6’ on center each way.
- The 10’ rolls worked perfectly for 2 courses for the building height.
- WrapShield was installed directly on the metal studs, with no waste, no tearing and has withstood days of rain and wind of 30 M.P.H. or greater.

QUICK QUOTE

“What else can we say, but it is ideal for us.”

Mark Williams, Project Superintendent

Phase I of NOAA Global Climate Change facility. WrapShield (orange) installation and cladding (silver) in progress. 6/25/06

Structure enclosed with WrapShield (orange) allowing interior construction to continue. 6/25/06

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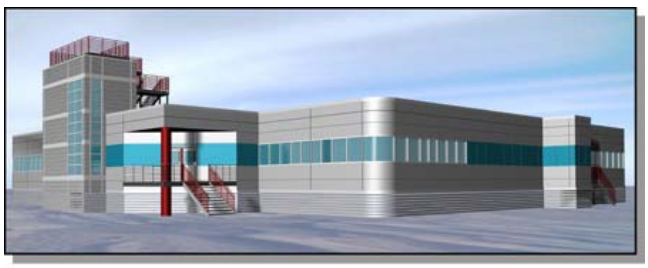
PROJECT PROFILE | BARROW GLOBAL CLIMATE CHANGE RESEARCH FACILITY

Deemed "A World Class International Research Facility in the American Arctic", *(see architectural rendering below)* the Barrow Global Climate Change Research Facility (BGCCRF) is under construction, and Phase I is scheduled for opening for arctic researchers in 2007.



Phase I Research/Education Facility

The current program provides for a building complex of 88,930 gross square feet. The design and construction are scheduled for five phases. According to a press release (NOAA 2004-R-999-32, 10/6/04) issued by the National Oceanic and Atmospheric Administration (NOAA), awarded $8.4 million to finance the design, preliminary work and construction of the first portion of this major research facility in the U.S. Arctic. The BGCCRF will be located south of the Ukpeagvik Inupiat Corporation (UIC)–Naval Arctic Research Laboratory (NARL) facilities on the shore of Imikpuk Lake, approximately 200 meters from the Arctic Ocean. *(see map below)*

Phase I Research/Education Facility Floor Plan

Due to its extreme location far north of the Arctic Circle, Barrow's climate is extremely cold and dry. Winters are dangerously cold, and summers are cool even at their warmest.

With the Arctic Ocean to the north, east, and west, and level tundra stretching 200 miles to the south, there are no natural wind barriers to assist in stilling the wind, permitting the lowering of temperatures by radiation, and no downslope drainage area to aid the flow of cold air to lower levels.

Temperatures remain below the freezing point through most of the year, with the daily maxima reaching higher than 32 degrees on an average of only 109 days a year.

Phase I nearly enclosed, showing VaproShield's WrapShield (orange) 7/16/2006

BGCCRF and UIC-NARL Location Map