



STRONGWELL

Cold Weather Applications

North Slope - Alaska

ALASKAN CONDITIONS

TEMPERATURES:

As low as -80°F

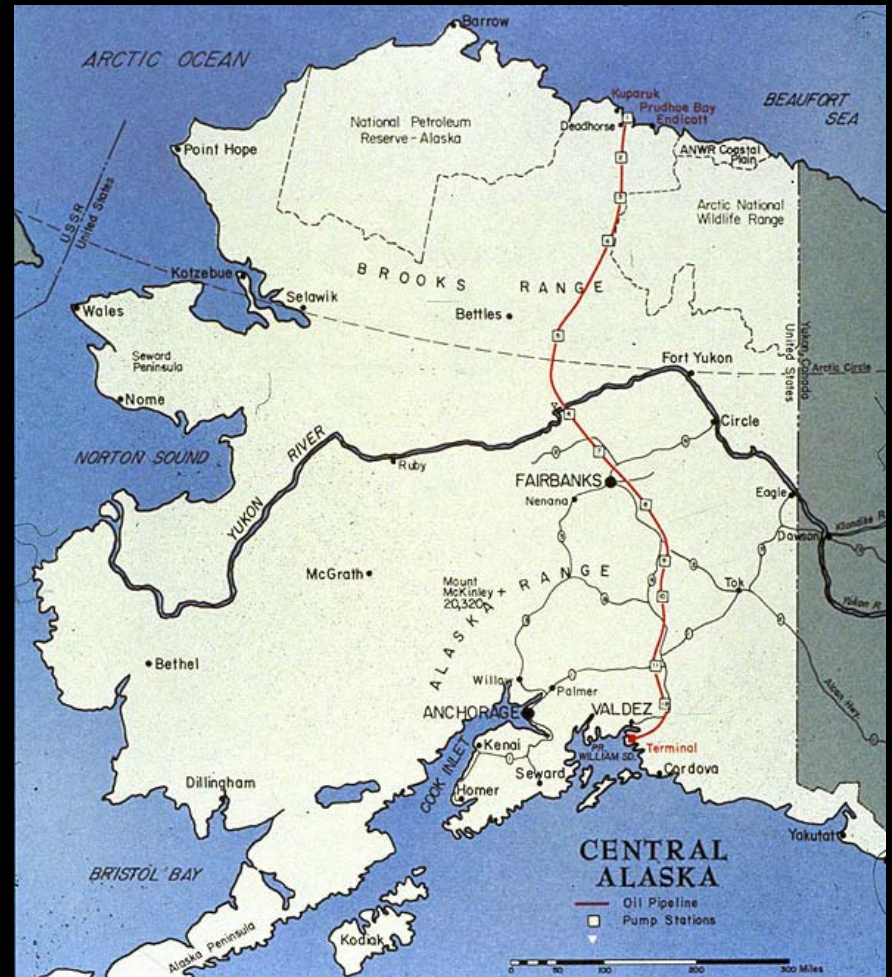
(Consistent -50°F on the Slope)

WINDS

Calm to High (+120 MPH)

Lots of:

RAIN, SNOW, SLEET, ICE



**Strongwell Products
continue to excel in this
harsh environment**

Why Cold Weather Composites?

- **Light Weight**

Tundra Roads-Environmental Impact

Fast Installation- Less Impact

- 2. Poor Thermal Conductivity**

Efficient Thermal Barrier

Safety – Poor Ice/Snow Formation

- 3. Dimensional Stability**

- 4. High Strength – Improved Impact – Cold**

- 5. Low Maintenance – Cost/Environmental Impact**

HISTORY OF USE

(STRONGWELL PRODUCTS)

AIR DEFENSE

RADAR INSTALLATIONS

ALASKA PIPELINE

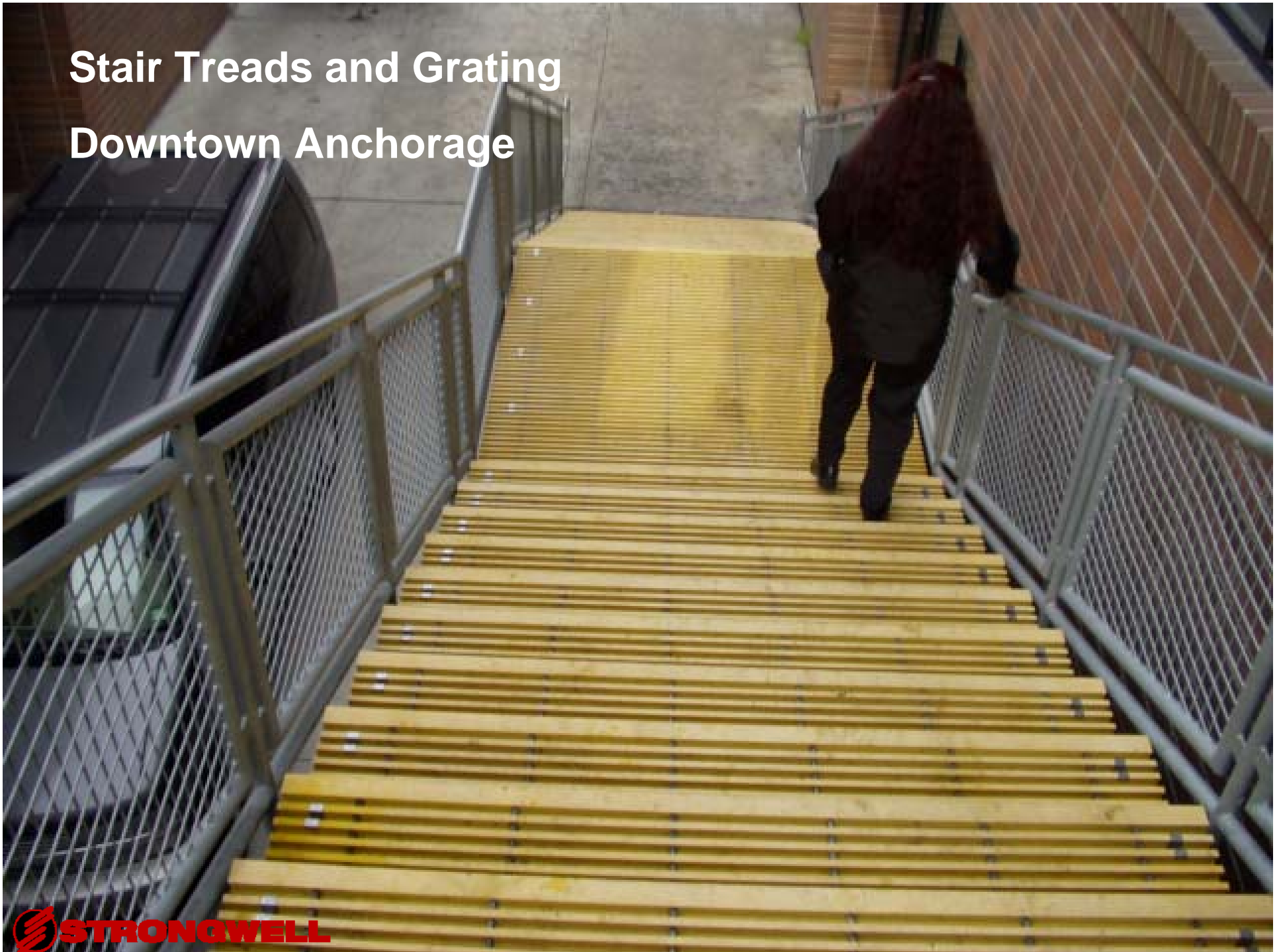
CURRENT APPLICATIONS

COMMERCIAL

INDUSTRIAL

OILFIELD

Stair Treads and Grating Downtown Anchorage





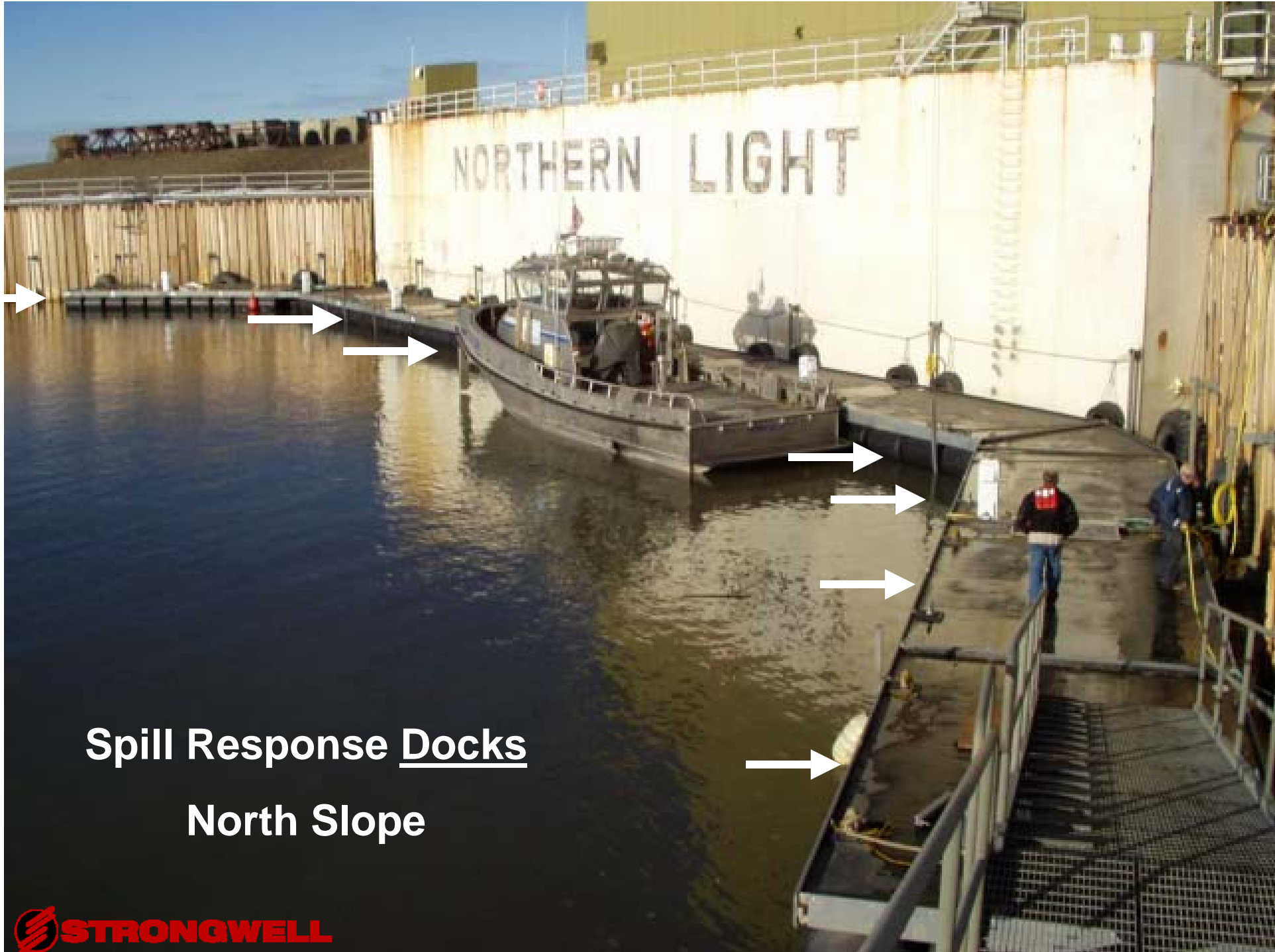
Commercial Applications

Anchorage, Alaska



Duradek/Duragrid Grating
Snow Removal Areas
Improved Anti-Slip
No problem with salt/snow melting chemicals





**Spill Response Docks
North Slope**



Docks constructed from
Composolite & EXTREN

North Slope Spill Response Docks



FRP Plated Decks



Composolite Structure



FRP ID Signs

Durashield Building Panels & EXTREN Structure



**Modular Fuel Filtration Facility for U.S. Airforce,
located in remote Alaska**

Durashield & EXTREN



Rolling Tool Shelters

Alaska- remote regions



All FRP Building for the FAA

**More than 20 buildings
located throughout Alaska**

- Durashield Building Panels**
- EXTREN Structure**
- Duradek Grating & Stairtreads**
- Safrail Handrails**



**FAA
GENERATOR
SHELTER**

Interior



Equipment mounted to the Durashield walls with "Tek" screws.

North Star Island

Quadco Building for BP

Durashield Panels with some
EXTREN structure supported
by an internal Steel Structure.
The building is six stories tall.

Largest FRP Building
In Alaska

Typically only run
one of their several
heaters!



“The Warmest Building on the Slope”

Accessories were mounted to the Durashield panels with “Tek” Screws.

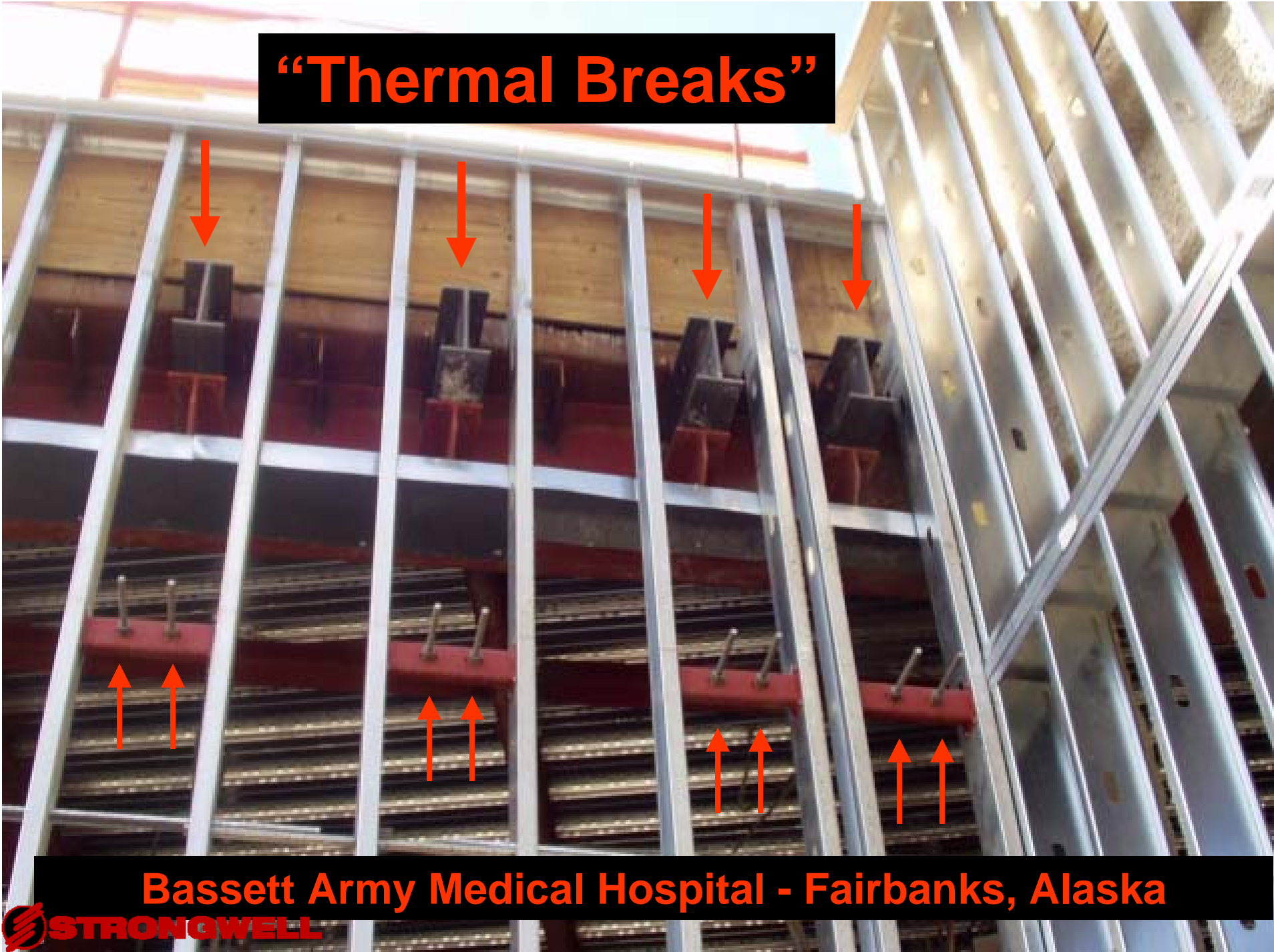
The panels were partially assembled in Fairbanks, then transported by truck (over the tundra road) to the slope.



North Star Island

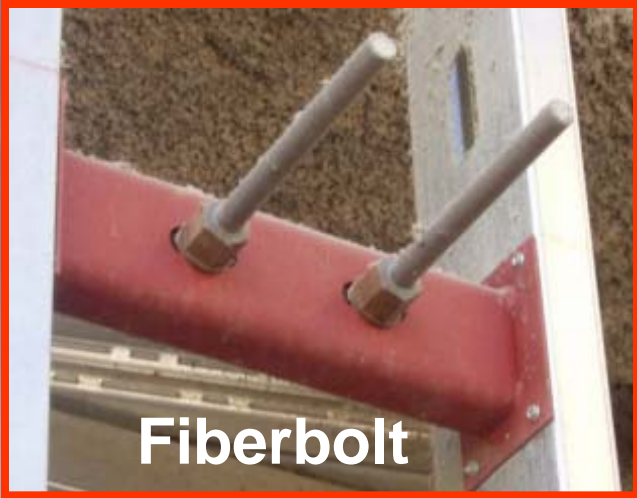
Durashield’s unique tongue and groove design and R22 insulation provide a warm, wind proof environment.

“Thermal Breaks”



Bassett Army Medical Hospital - Fairbanks, Alaska

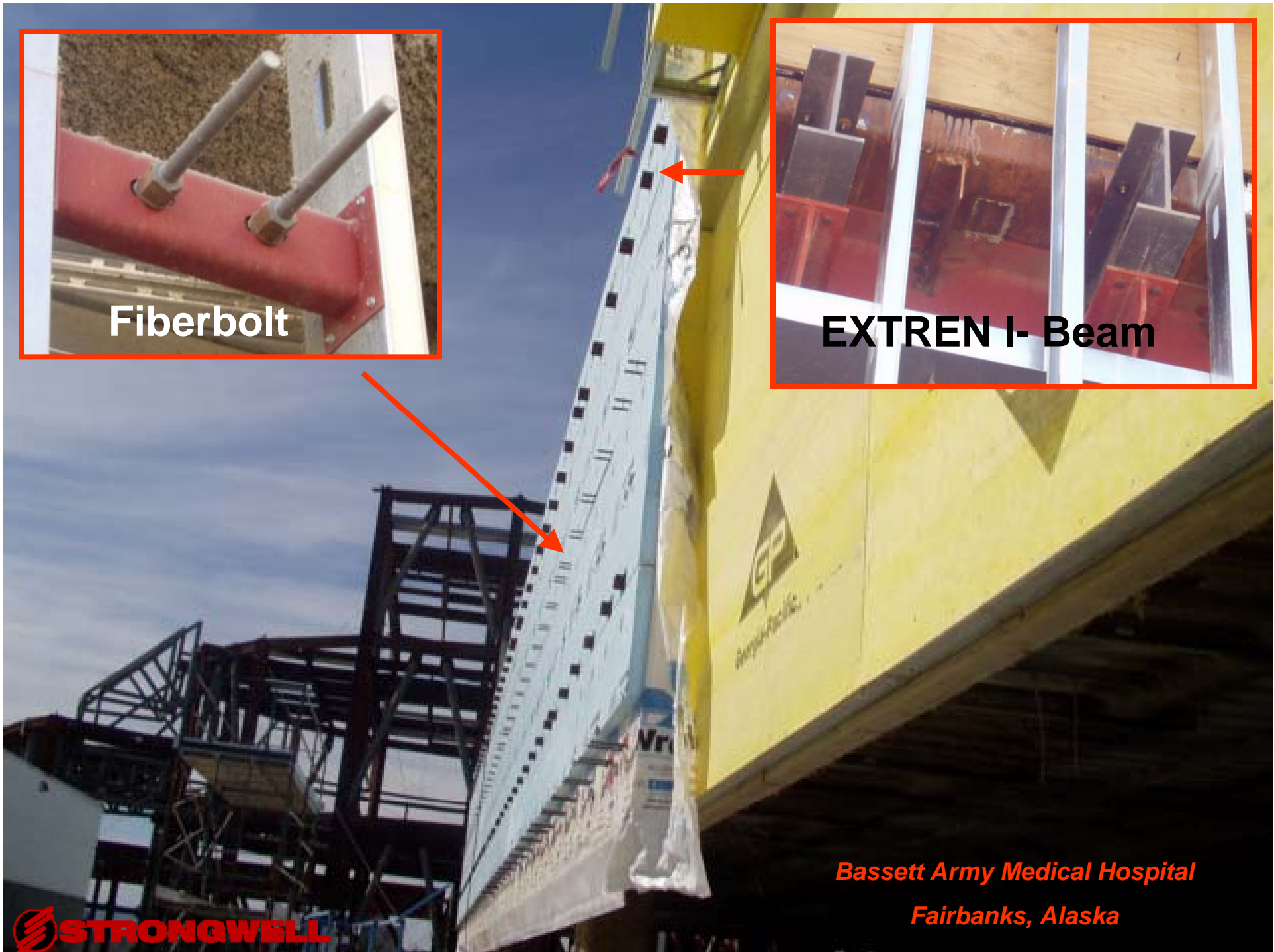




Fiberbolt



EXTREN I- Beam



*Bassett Army Medical Hospital
Fairbanks, Alaska*

Why Weight & Thermal Insulation Is Critical In Cold Climates

*MAINTAIN THE STRUCTURAL
INTEGRITY OF THE ROADS*

TO PREVENT SUBSIDENCE.



*Typical Mobile Drilling Rig
Alaska- North Slope*



**Rigs are moved on
“Board Roads”**

**Fiberglass Road Panels
made from Strongwell
products have replaced
traditional wood & steel
panels**



Compared to Steel, the Fiberglass Mat....

- Has a lower elevation- easier rig move
- The 8 ft x 30 ft panels are easier to move-less time
- Lasts 5 times longer (so far)

Fiberglass Mat

Steel & Wood Mat

The success of these FRP Road Mats in extreme temperature and loading conditions further illustrates the viability of Strongwell Composites in cold environment applications.

