

# Nordic Museum: Embracing Nordic Design Principles

Case Study



## A Living Space

The Nordic Museum is an internationally recognized museum and cultural center in Seattle, WA that celebrates the history, arts and culture of all five Nordic countries: Denmark, Finland, Iceland, Norway, and Sweden. It shares stories of the Nordic region and the Nordic American experience. Since its founding in 1980, it has operated from within an elementary school building built in 1903. The space no longer fit the growing needs of the museum, and plans were put into place to build a new, three-story, 57,000-square-foot Nordic Museum facility to house its 77,000 thousand-plus artifacts. The new building was intended to be a “living space” with immersive experiences where history and culture come alive.

## The Goal

The Nordic Museum project’s overarching goal was to connect the new structure--in its inherent design and function--to its cultural roots and building principles. The Museum houses a climate-controlled collection, exhibit spaces, a concert hall, meeting rooms, outdoor spaces, a café, and gift shop. Given it’s connection to the Nordic Region, it was important that the building not only be beautiful, but that it also embrace and reflect the Nordic principles of efficiency, comfort, economy, and effective use of natural light.

### The Challenge

The project would need to fuse heritage with modern architecture to achieve spaces that exemplify Nordic design with clean and simple lines, exceptional function and comfort, sleek shapes, and a connection to nature and the environment. The project would need to be built with sustainability in mind and careful attention to the building envelope, as it sought to attain LEED Silver certification.



### The Solution

To create an efficient building that consumes less energy and contributes to less greenhouse gas emissions, the architectural and design team placed its focus on creating a tight, high-performance building envelope. The wall assembly was comprised of 5/8" interior gypsum wall board, Division 5 metal stud framing, 5/8" Desglass Gold sheathing, Vaproshield SA water resistive barrier, and 2-1/2" of ROCKWOOL COMFORTBOARD™ 110. Finally, the building's exterior was clad with a vertically-striated zinc skin. ROCKWOOL stone wool insulation was chosen as the building's continuous exterior insulation due to its high-performance benefits and its Danish roots, which complemented museum's purpose and cultural connection. The robustness and durability of COMFORTBOARD™ 110 were important to designers since ROCKWOOL products are proven to withstand harsh conditions due to their dimensional stability, water resistance, excellent drying potential (vapor permeability) and superior thermal resistance. The rigidity of the product allowed efficient install and helped contractors achieve zero gaps and zero sagging for a tighter building envelope that would stand the test of time. Housing priceless and culturally significant artifacts, fire protection was also a critical goal in the design of the new museum. Non-combustible ROCKWOOL stone wool proved best-in-class, with the ability to add passive fire protection and resist temperatures up to 2,150°C. Contributing to greater occupant and property safety and security was a considerable advantage. The sustainability profile of ROCKWOOL stone wool insulation which is made from abundant natural raw materials and a high recycled content, and the circularity built into its production process lent itself to the project's commitment to environmental responsibility. With ROCKWOOL inside, the Nordic Museum, becomes an important hub promoting the area's strong Nordic roots, embodying heritage, life, culture and innovation. Guests are sure to be impressed by the museum's linear Fjord Hall, with its white faceted walls that are intended to represent the fjord's glacial origins and direct visitors into the exhibits. While visitors may not realize all the elements that contribute to the museum's inviting, bright, and engaging spaces, ROCKWOOL stone wool insulation will be quietly keeping them and everything inside, safe, secure and comfortable for years to come, so they can immerse themselves in a truly informative and entertaining Nordic experience.

“The use of ROCKWOOL insulation board was crucial in the design of the exterior wall assembly at the Nordic Museum. The COMFORTBOARD™ 110 insulated sheathing is not only fire and water resistant, but also rigid enough to prevent sagging of the metal wall panels. It solved several design problems at once, and has Nordic roots as well!”

- *Dustann Jones, Senior Associate AIA,  
LEED AP BD+C – Mithun*



**Year of Completion:**

2018

**Location:**

Seattle, Washington - 2655 N.W. Market St.

**Architect:**

Mithun Inc.

**Collaborators:**

Juhani Pallasmaa (Nordic Design Consultant)

Ralph Applebaum Associates (Exhibit Design)

**Owner:**

Nordic Museum

**Building Type:**

Education and Cultural Facility

**Size:**

57,000 sq. ft. expansion

**ROCKWOOL Application:**

Exterior Walls - Continuous Insulation

**Product type:**

COMFORTBOARD™ 110

**Certification:**

Certified LEED® Silver (pending)

**Notable:**

Citation Award, 2018, AIA Washington Council Civic Design

**Estimated Project Value:**

\$54 Million

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