

# Award winning heating system solves mould, health issues for Starblanket family

● Melanie McKay | June 26, 2021



Sonia and Wendel Starblanket pictured holding the Association of Professional Engineers/Geoscientists of Saskatchewan (APEGS) Blanket of Warmth Project Award. Photos Sonia Starblanket

When Wendel Starblanket saw that his wife couldn't spend 24 hours in their home without experiencing headaches and breathing issues, he decided to find a solution for the mould in their house on Starblanket Cree Nation.

More than two years later, a modified heating system add-on called Blanket of Warmth, designed to improve air quality and provide radiant heating for their home and his brother's, has won engineering and green building technical awards.

"An interesting thing is my wife's breathing improved, my breathing improved, her allergies went away, her headaches went away; prior to us having radiant link we used to wonder why she was getting headaches and couldn't stay in the house for 24 hours, I'd have to take her out to get fresh air. Once we put the radiant link in we can stay in the house now, there's no more mould, there's no more heavy breathing," Starblanket said.

In his quest to improve his family's living conditions, Starblanket talked with an acquaintance, Aura Lee MacPherson of MacPherson Engineering, and together they assembled a team that worked to address the issue of poor air quality and dampness in First Nations homes. Starblanket spoke with elders and community members and ensured protocols were followed and ceremony was held before the project began, while MacPherson invited industry partners to participate.

Responsible energy consumption and clean production were important principles for the design, Starblanket said.

MacPherson, who was the award recipient, said, “I really think the beauty of this project was using the principles of the tipi, being respectful of the United Nation’s 17 Sustainable Development Goals and looking for industry partners to try and solve a problem.”

She highlights the team effort, collaborative approach and Indigenous knowledge-based inspirational design. “We really want to create conversations and we want to set people up for success and not failure,” she said. She hopes the project gets people talking about better indoor air quality and heating and hopes for future expansion.

The team also included the United Nation Regional Center of Expertise on Education for Sustainable Development, the University of Regina Industrial Systems capstone engineering students, Uponor plumbing and heating, Fries Tallman Lumber, Anaquod Plumbing and Heating and Creative Spaces.

Incorporating Indigenous knowledge to create the solution, the system not only improves indoor air quality, it reduces the risk of fire and is energy efficient, MacPherson said. The Blanket of Warmth Project is considered a design solution to the substandard indoor environmental quality in many homes across the country, she said.

The Blanket of Warmth Project received a Provincial Association of Professional Engineers/ Geoscientists of Saskatchewan (APEGS) Exceptional Engineering Award and a national Sustainable Architecture and Building magazine- Canadian Green Building Technical Award.

Starblanket hopes more homes will adopt the system and said, “Just the two of us have it so far but our goal is to have at least one system in every First Nation across the country.”

“We hope that this can warm all the people and warm their homes and hearts and keep their home fires burning brightly and that was the initial idea.”

Questions about the system can be directed to Lynda Bigknife-Red Dog Limited, the economic arm of Starblanket First Nation. 306-331-8480.