

City of Winnipeg

Location: Winnipeg, MB

Application: Salt & Sand Storage

Building Series: TITAN®

Building Size: 100' x 220' (30.4m x 67.0m)



Cover-All Key to Road Maintenance Management

The responsibility of providing safe, well-maintained roads to the city of Winnipeg is assigned to the Public Works Department for the city. Currently with a population of over 700,000 residents, the city of Winnipeg ensures that the road maintenance needs are met by the various services they provide. The city has also taken a proactive approach to road maintenance management by enclosing the salt required for the winter months. For this facility, they chose a 100' x 220' (30.4m x 67.0m) Cover-All TITAN® building. "We constructed this facility in the 2001-2002 winter season to reduce the amount of salt that is emitted into the atmosphere or the environment", says Ken Boyd, support services engineer. "It is part of our 'Salt Management Plan'." Environment Canada has requested the development of a Salt Management Plan for any municipality that uses over 500 tonnes of salt on an annual basis.

The Cover-All® building houses approximately 10,000 tonnes of winter sand which is treated with 5% sodium chloride. In addition to this, the building houses 1,000 tonnes of pure salt. A temperature of warmer than -10°C (14°F) requires the use of the salt to de-ice the streets. For temperatures colder than -10°C (14°F), the salt-sand mixture is used. "The climate in Winnipeg is such that the majority of winter we have to use more sand than salt. That's why we have approximately a 10 to 1 ratio of salt housed in our Cover-All building," says Boyd.

"We were looking for a structure that was easy to erect and large enough that we could house the amount of material that we needed to do our work," says Boyd. "We did some searches and came up with several companies and we went with the Cover-All product." The clear-span building includes a drive through system so operators could fill their loads out of the wind, snow and rain. The building is designed with two doors on either side to allow for efficient loading of materials and stops at the liquid tanks. "To date the building has performed very well. If we can keep our people out of the elements, it makes a safer work environment and keeps them happy. That's vital."

Built for long-term durability, the advanced steel finishing processes of Cover-All® building components ensure all steel is corrosion-resistant and tension-membrane covers will never rust even under the harshest conditions. Designed to meet National Building Code, each Cover-All® building is constructed with durable components to stand up to the harshest conditions. "The building has stood up very well to a very harsh environment – whether it's the corrosiveness of the salt materials we store or the cold temperatures of our winters," says Boyd. "We are very happy with its performance to date."

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- Ken Boyd, support services engineer



The 100' x 220' (30.4m x 67.0m) Cover-All® TITAN® building located in the north area of Winnipeg.



"We don't have lights on during the day. Another type of structure would require a lighting system," says Ken Boyd.



The Cover-All building houses 10,000 tonnes of winter sand and 1,000 tonnes of pure salt.



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