

Case Study

Extreme Environments

Calgary, Ontario, Canada

Exeloo has recently supplied a third Titan model toilet unit to Calgary City in addition to their previously purchased Exeloo Galaxy unit.

Because of the extreme cold in Calgary and the depth of the permafrost level in winter, the first installations of Exeloo toilets all were built over a pre-prepared basement area that was able to be accessed from outside the toilet cubicle and is heated to ensure the services are protected from freezing temperatures.



The construction of a basement under the toilet facility is a costly process so, on the latest installation at the NW LRT Extension, Exeloo recommended that the service hole in the building could be increased in size and placed directly over a standard manhole riser that the services can be brought up through and connections made. This method minimises the cost of installation in these extreme cold environments and also reduces the ongoing costs as the underground area that needs to be heated is reduced significantly.



As the temperature in Calgary can get as low as -40°C , all of the toilet units built for this environment incorporate additional insulation to all of the walls and ceilings, underfloor heating, trace wire lagging to the water supply system and large ceiling fan heaters in the main cubicle and service area to ensure safe operation of the toilet units throughout the year.



Nhulunbuy, Northern Territory, Australia

Nhulunbuy is a mining town located on the north eastern tip of Arnhem Land in the Northern Territory of Australia. This location is extremely isolated as the road can only be accessed by 4 wheel drive vehicles for part of the year. Being only 12°S of the equator, the area is also extremely hot and humid. The Nhulunbuy Corporation and the local community have purchased three Saturn toilet units over a period from 2002 to 2008.

Because of the isolation, to get these to the installation site, the units were shipped to Adelaide. They were then transported by road train 3,000 kms to Darwin where they were then placed on a transport barge which took them on the Arafura Sea around the northern coast of Northern Territory to the port of Nhulunbuy. They were then transported to their individual site destinations.

In the hot humid environment, it is important to ensure there is good air flow and ventilation through the toilet facility and the design of the Exeloo toilet facilities can be modified to accommodate this need. In addition, in such isolated environments, it is essential that the products are extremely robust and reliable to minimise any requirement for technical backup and support.