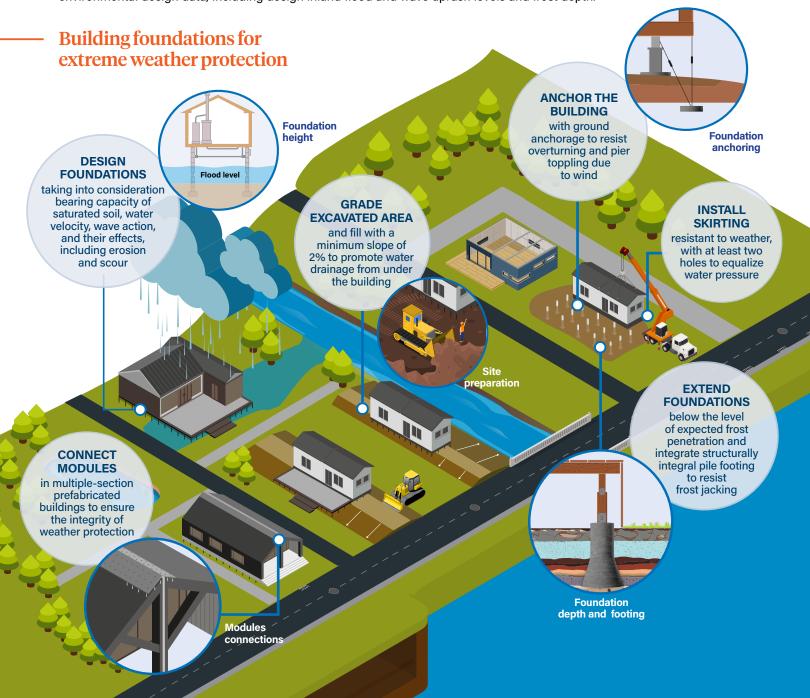
Setting foundations for improved climate resilience of homes

CSA Z240.10.1:19, Site preparation, foundation, and installation of buildings

The changing climate impacts the amount and distribution of rain, snow, and ice and increases the risk of floods in communities across Canada. Proper structural foundations, especially when building in flood zones, are critical in protecting homes and reducing potential damages and repair costs. The National Standard of Canada, CSA Z240.10.1:19, guides home builders and municipalities through considerations for climate adaptation related to building foundations.

The Standard addresses site preparation, permanent foundations, and installation of single- or multi-section buildings supported on longitudinal floor beams to improve their resistance to floods. It also provides guidance for obtaining environmental design data, including design inland flood and wave uprush levels and frost depth.



Adopting the recommendations of CSA Z240.10.1:19 can help:

Who should use the Standard?

- · Municipalities and regional government agencies
- Regulatory authorities
- · Land-lease community owners
- · Building and construction professionals
- Building owners
- Homeowners
- Property and casualty insurers
- · Federal, provincial, and territorial governments



Improve flood resilience

of residential buildings to reduce the risk of damages



Reduce repair costs

by providing guidance to protect buildings from floods



Adapt the measures

for flood mitigation to address the impacts of climate change



Take advantage of best practices

for site preparation, building foundations, and installation of buildings



Enhance municipal planning

by implementing the standard into strategic planning and development processes



Increase public confidence

by demonstrating a proactive approach to flood mitigation

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For more on CSA Group research and standards for more resilient buildings and infrastructure, visit csagroup.org/ResilientInfrastructure



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