

Floodwalls

What are Floodwalls?

Floodwalls are permanent, freestanding walls around part of or the entire property to prevent floodwater from reaching buildings and external areas such as parking lots. Floodwalls are typically constructed as poured concrete or masonry walls, designed and constructed to withstand the force of water at the high water level.

Where can they be installed?

Floodwalls are best suited to properties where flood depths are relatively shallow, and vehicular access is from an area above the high water level.

Floodwalls can also be erected around the perimeter of a building or a critical exterior area.

In areas where the vehicular entrance is not above the high water level, an opening is left in the wall for vehicular access, and a temporary barrier such as a Flood Gate is used to seal the opening to the site when flooding is predicted.

What else should you know about Floodwalls?

If used to protect outside areas, a storm sewer backflow prevention device may be required to prevent floodwater from entering the site via the storm sewer and catchbasins. Local stormwater may need to be pumped from the site when the backflow prevention device is operating and/or the barriers are closed.

Floodwalls cannot be implemented if they will block drainage and/or worsen flooding on neighbouring properties. Engineering studies may be required to assess the impact on flooding beyond the property.

Cost Range

Costs are highly variable, and depend on the height, length and materials used for the floodwall. A 1 m high floodwall is estimated to cost approximately \$2,000 per linear metre.

What type of protection do they provide?

Floodwalls provide Passive Dry Protection.



building (source: [fema.gov](https://www.fema.gov))

Masonry floodwall protecting a school