



Estimated Cost Ranges for Completing Residential Flood Protection Projects

Introduction to the Home Flood Protection Program

The Home Flood Protection Program is an educational service designed to help homeowners reduce their risk of basement flooding and minimize damage if flooding occurs. The program is developed by the Intact Centre on Climate Adaptation (ICCA) at the University of Waterloo.

Introduction to the Estimated Cost Ranges for Residential Flood Protection Projects

This list has been developed to give homeowners an idea of what it might cost to complete a do-it-yourself (DIY) flood protection project or to pay a qualified professional to complete a project for you. Estimated life expectancies have been provided for select projects. A note has also been made about whether or not the listed projects commonly qualify for government subsidies or insurance discounts. Check with your local authority having jurisdiction (e.g. municipality) and insurance provider to confirm qualification.

Cost Categories

Cost range categories to complete a project have been set as follows:

Low- \$0-\$1000

Medium- \$1,000- \$5,000

High- Over \$5,000

Best practices for Hiring Contractors

For more information about best practices for hiring a contractor, please see this resource created by the Province of Ontario. [Your Rights when starting Home Renovations and Repairs](#)



What to Consider Before You Get Started

- ✓ Check for local government subsidies and insurance discounts that can help cover the cost of your project.
- ✓ Check your local by-laws to make sure that your project meets local requirements.
- ✓ Secure required permissions and permits before you begin.
- ✓ Call before you dig to ensure your safety and the protection of local utility services. [Call Before You Dig](#)

Help us improve the Resource List

We welcome your input! If there is a business that you would like to see added, please share it with us. Please direct all requests to Intact.Centre@uwaterloo.ca.

Please note: The Intact Centre on Climate Adaptation is providing this list for the convenience of interested homeowners only. The Intact Centre on Climate Adaptation is in no way providing advice or quotations for projects of any kind.



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Outside the Home

Low- \$0-\$1,000 Medium \$1,000-\$5,000 High Over \$5,000

Eaves Troughs and Downspouts

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Clean out eaves troughs	Low	\$250-\$400	N	N
Install eaves troughs and downspouts	Medium-High	\$6-\$10 per linear foot	N	N
Install soffits and fascia	Medium-High	\$10-\$15 per linear foot	N	N
Extend downspouts	Low	\$25-\$50 per downspout	N	Y
Disconnect downspouts and capping weeper pipes	Low	\$100-\$250 per downspout	Y	Y

Foundation and Walls

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Insert expanding polyurethane into cracks less than 1/4"	Low	\$50-\$100	N	N
Urethane injection of poured foundation cracks over 1/4"	Low-Medium	\$400-\$800	N	N
Excavate and repair foundation crack over 1/4"	Medium-High	\$1,000-\$2,000	N	N



Exterior damp proof of foundation	Medium-High	\$150-\$300 per linear foot	N	N
Exterior damp proof of foundation and installation of foundation drainage	High	Minimum \$5,000	N	N
Repointing soft mortar	Low-Medium	Minimum \$500, \$4-\$7 per square foot	N	N
Repointing hard mortar	Low-Medium	Minimum \$500, \$5-\$10 per square foot	N	N
Replace deteriorating brick	Low-High	Minimum \$500, \$25-\$50 per linear foot	N	N

Landscaping

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Install a rain garden	Low-Medium	\$500-\$2500	Y	N
Install rain barrel	Low	Up to \$500	Y	N
Install a cistern	Low-Medium	\$500-\$4500	Y	N
Install infiltration gallery	Low-Medium	\$500-2500	Y	N
Build wooden retaining wall	Medium-High	(min \$1500) \$30-\$50 per square foot	N	N
Build concrete retaining wall	High	(min \$5000) \$40-\$70 per square foot	N	N



Major regrading of lawn or garden beds around foundation walls	High	\$5,000+	N	N
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Driveways, Walkways and Patios

Description	Cost Category	Estimated Cost Range and Life Expectancies	Potential Government Subsidy	Potential Insurance Discount
Seal asphalt driveway	Low	\$.30 per square foot (1-3 year life expectancy)	N	N
Resurface existing asphalt driveway	Medium-High	\$3- \$5 per square foot (10-20 year life expectancy)	N	N
Install interlocking brick	Medium-High	\$8-\$16 per square foot (15year+ life expectancy)	N	N
Install permeable paving	Medium-High	\$10-20 per square foot	N	N
Install concrete driveway, no pattern	High	\$12-\$20 per square foot (30year+ life expectancy)	N	N
Install concrete slab patio	Medium-High	\$15-\$25 per sq. ft. (30- 40 year life expectancy)	N	N
Install concrete patio stones on a correctly prepared subgrade	Medium-High	\$5-\$7 per square foot (30-40 year life expectancy)	N	N
Install permeable paving walkways and patios	Low-Medium	\$6-\$8 per square foot (20-30 year life expectancy)	Y	N



Doors and Stairwells

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Replace caulking and weather stripping around doors	Low	\$50-\$250 per door	N	N
Install exterior door	Low-Medium	\$750-\$3,000	N	N
Install exterior basement stairwell	High	\$10,000 and up	N	N
Install garage door	Low-Medium	\$500-\$2,500 per door	N	N

Exterior Drains

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Closed circuit television (CCTV) camera scoping of drain lines	Low	\$250-\$500	N	N
Clear blockage in drains	Low	\$250-\$500	N	N
Install drain at existing basement walkout stairwell	Low-Medium High	\$750-\$1,500 (new construction) \$5,000+ for retrofit	N	N
Install drain at bottom of sloped driveway	High	\$5,000+	N	N



Windows and Window Wells

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Replace caulking around windows	Low	\$250-\$500	N	N
Replace windows	Medium-High	\$600-\$1000 per window	N	N
Install window well covers	Low	\$25-\$50 per window	N	N
Install window wells	Low-Medium	\$900- \$1,500 per window	N	N

Plumbing Fixtures

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Install or repair outdoor faucet	Low	\$250- \$500	N	N
Flood alarms on fixtures such as water softener	Low	\$25-\$150	N	Y



Inside the Home

Low- \$0-\$1,000 Medium \$1,000-\$5,000 High Over \$5,000

Storm and Sewer Laterals

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Closed circuit camera inspection of sewer latera	Low	\$250-\$500	N	N
Install interior sewer lateral cleanout	Low	\$500	N	N
Snake out obstruction in sewer line	Low	\$250-\$500	N	N
Repair collapsed or damaged section of sewer line below yard	Medium-High	\$3,000+	N	N

Floor Drains

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Snake out obstruction in sewer line below house	Low	\$250-\$500	N	N



Repair collapsed or damaged section of sewer line below house	Medium	\$1,000-\$2500	N	Y
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Backwater Valves

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Install backwater valve	Medium	\$750- \$1250	Y	Y
Clean out backwater valve	Low	\$0 DIY-\$100	N	Y
Install alarm	Low	\$75-\$150	N	Y
Seasonal maintenance check by plumber	Low	\$100-\$250	N	Y

Foundation Drains (Weepers)

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Closed circuit camera inspection of foundation drains	Low	\$250-\$500	N	N



Sump Pits and Pumps

Description	Cost Category	Estimated Cost Range and Life Expectancies	Potential Government Subsidy	Potential Insurance Discount
Replace Sump Pump	Low	\$350-\$700 (2-7 year life expectancy)	Y	Y
Install submersible pump and well	Medium	\$1,500+	Y	Y
Install backup battery	Low-Medium	\$500 - \$1,500	Y	Y
Install backup generator	High	\$5,000+	N	Y
Install alarm	Low	\$75-\$150	Y	Y
Seasonal maintenance check by plumber	Low	\$100-\$250	N	Y

Exposed Foundation Walls and Floors

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Install interior damp proofing	Low-Medium	\$100-\$150 per linear foot	N	N
Damp-proof foundation and install perimeter drainage tiles	Medium-High	\$2,500+	N	N



Urethane injection of cracks greater than 1/4" in poured concrete	Low-Medium	\$400-\$800 each	N	N
Injection repair of tie rod hole	Low-Medium	\$250-\$500	N	N

Finished Walls and Floors

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Insulate basement	Low-Medium	\$1 and up per square foot	N	N

Plumbing

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Install new main shut off valve	Low	\$150-\$300	N	N
Seasonal maintenance check by plumber	Low	\$100-\$250	N	Y



Limiting Indoor Humidity

Description	Cost Category	Estimated Cost Range and Life Expectancies	Potential Government Subsidy	Potential Insurance Discount
Install bathroom exhaust fan	Low-Medium	\$500-\$1,200 (10-15 year life expectancy)	N	N
Install dehumidifier	Low	\$150-\$300 D-I-Y	N	N

Electrical

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Install new breaker panel	Low-Medium	\$1,000-\$2,000	N	N

Information Adapted from Carson Dunlop Home Reference Book, 2013; Jeff Thompson, Thompson Environmental, 2017; Ron Bolender, The House Doctor, 2018