



## **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 was 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. <u>Your</u> 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	<b>Estimated Cost Range</b>	Potential Government Subsidy	Potential Insurance Discount
Clean out eaves troughs	Low	\$100-\$200	N	N
Install eaves troughs and downspouts	Medium-High	\$10-\$30 per linear foot	N	N
Install soffits and fascia	Medium-High	\$6-\$20 per linear foot	N	N
Extend downspouts	Low	\$25-\$50 per downspout (DIY)	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	\$500-\$2,000	N	N
Excavate and repair foundation crack over 1/4"	Medium-High	\$1,000-\$2,000 and up based on depth and area	N	N





Exterior damp proof of foundation	Medium-High	\$100-\$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, \$10-\$30 per square foot	N	N

## Landscaping

Description	Cost	<b>Estimated Cost Range</b>	Potential	Potential
	Category		Government	Insurance
			Subsidy	Discount
Install a rain garden	Low-Medium	\$500-\$3,000	Y	N
Install rain barrel	Low	Up to \$500	Y	N
Install an inground cistern	High	\$12,000-\$21,000	Y	N
Install infiltration gallery	Low-Medium	\$500-\$3,000	Y	N
Build wooden retaining wall	Medium-High	(min \$1,500) \$20-\$50 per square foot	N	N
Build concrete retaining wall	High	(min \$5,000) \$40-\$70 per square foot	N	N





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

## **Driveways, Walkways and Patios**

Description	Cost Category	Estimated Cost Range and Life Expectancies	Potential Government Subsidy	Potential Insurance Discount
Seal asphalt driveway	Low	\$0.30-\$0.35 per square foot (1-3 year life expectancy)	N	N
Resurface existing asphalt driveway	Medium-High	\$5-\$12 per square foot (10-20 year life expectancy)	N	N
Install interlocking brick	Medium-High	\$15-\$30 per square foot (15 year+ life expectancy)	N	N
Install permeable paving	High	\$20-\$40 per square foot	N	N
Install concrete driveway, no pattern	High	\$20-\$40 per square foot (30 year + life expectancy)	N	N
Install concrete slab patio	High	\$20-\$50 per sq. ft. (30-40 year life expectancy)	N	N
Install concrete patio stones on a correctly prepared subgrade	Medium-High	\$15-\$50 per square foot (30-40 year life expectancy)	N	N
Install permeable paving walkways and patios	High	\$20-\$40 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	Medium	\$750-\$3,000 and up	N	N
Install exterior basement stairwell	High	\$10,000 and up	N	N
Install garage door	Medium	\$1,000-\$5,000 per door	N	N

### **Exterior Drains**

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





### **Windows and Window Wells**

Description	Cost Category	Estimated Cost Range	Potential Government Subsidy	Potential Insurance Discount
Replace caulking around windows	Low	\$40-\$90 per window	N	N
Replace windows	Medium-High	\$600-\$1,000 and up per window	N	N
Install window well covers	Low	\$35-\$500 per window	N	N
Install window wells	Low-Medium	\$900- \$2,500 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-Medium	\$800-\$3,000	N	N
Snake out obstruction in sewer line	Low	\$250-\$700	N	N
Repair collapsed or damaged section of sewer line below yard	Medium-High	\$1,000-\$3,000 and up	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-\$550	N	N





Repair collapsed or	Medium	\$1,000-\$3000 and up	N	Y
damaged section of sewer				
line below house				

### **Backwater Valves**

Description	Cost Category	<b>Estimated Cost Range</b>	Potential Government Subsidy	Potential Insurance Discount
Install backwater valve	Medium	\$1,500- \$5,000	Y	Y
Clean out backwater valve	Low	\$0 DIY-\$100-\$300	N	Y
Install alarm	Low	\$75-\$150	N	Y
Seasonal maintenance check by plumber	Low	\$100-\$300	N	Y

# $Foundation\ Drains\ (Weepers)$

Description	Cost Category	<b>Estimated Cost Range</b>	Potential Government Subsidy	Potential Insurance Discount
Closed circuit camera inspection of foundation drains	Low	\$325-\$700	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	\$600 - \$2,000	Y	Y
Install backup generator	High	\$5,000+	N	Y
Install alarm	Low	\$75-\$400	Y	Y
Seasonal maintenance check by plumber	Low	\$100-300	N	Y

### **Exposed Foundation Walls and Floors**

Description	Cost Category	<b>Estimated Cost Range</b>	Potential Government	Potential Insurance
	Cutegory		Subsidy	Discount
Install interior damp proofing	Low-Medium	\$100-\$200 per linear foot	N	N
Damp-proof foundation and install perimeter drainage tiles	High	\$10,000+	N	N





Urethane injection of cracks greater than 1/4" in poured	Low-Medium	\$500-\$2,000 each	N	N
concrete				
Injection repair of tie rod hole	Low-Medium	\$275-\$550	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	<b>Estimated Cost Range</b>	Potential Government Subsidy	Potential Insurance Discount
Install new main shut off valve	Low	\$150-\$600	N	N
Seasonal maintenance check by plumber	Low	\$100-\$300	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 standalone dehumidifier	Low	\$175-\$400 (DIY)	N	N

### **Electrical**

Description	Cost Category	<b>Estimated Cost Range</b>	Potential Government Subsidy	Potential Insurance Discount
Install new breaker panel	Medium-High	\$1,000-\$4,000 and up	N	N

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