

Choosing Efficient Home Insulation

Home Description

4

Bedroom

1

Floor

Full

Basement

2 Car

Garage

4,200 Square Feet

Total Heated Area



Comparing basic insulation with efficient insulation

Most homes with basic insulation contain fiberglass insulated walls, blown cellulose attics, uninsulated or partially insulated basement walls, uninsulated basement floors, and fiberglass blankets on the garage ceiling.

At Strukt Solutions, an efficiently insulated home contains Sprayed polyurethane foam, appropriate wooden frame studs, and polystyrene boards on walls as well as appropriate R-Value spray foam on attics, basement walls, garage ceiling, and heating ducts.

Insulation Costs

Insulation costs in 2023

\$4,000

Average basic insulation cost

\$10,000

Average efficient insulation cost

Average yearly energy bills

\$2,934

Home with basic fiberglass insulation energy bill

\$1,090

Home with efficient spray foam insulation energy bill

Rebates

You can get rebates as much as

\$2,000

on eligible home improvement projects such as insulation.

ROI on installing Efficient insulation

Investment

investment = cost of efficient insulation – cost of basic

$$\text{\$10,000} - \text{\$4,000}$$

Cost of efficient insulation

Cost of basic insulation

$$=\text{\$6,000}$$

Cost of investment

Returns: Year One

Returns = rebates + energy bill difference

$$=\text{\$2,000} + (\text{\$2,934} - \text{\$1,090})$$

Rebates

Basic energy bill

Efficient energy bill

$$=\text{\$3,844}$$

Returns

Return on Investment

ROI = (returns / investment) * 100

$$(\text{\$3,844} / \text{\$6,000}) * 100$$

$$=64\% \text{ ROI}$$

Return on investment with efficient spray foam insulation

This gives a 64% ROI in the first year with the rebates and a 30% ROI in subsequent years or a 30% yearly ROI from year one without rebates.