

Residential Steel Roofing The Long Term Choice



Steel has been used in North American construction projects for more than 150 years and still remains one of the strongest, most durable and economical building materials available today. Although steel has been traditionally associated with high-rise buildings, bridge structures and commercial and industrial projects, it is rapidly emerging as the logical material of choice for residential construction.

Cold formed sheet steel panels are lightweight, economical, easy to handle and represent a high quality alternative to traditional roofing materials.

Environmental and economic considerations have prompted many residential homeowners to investigate alternative building materials and methods, and steel roofing panels have proven technical benefits as well as excellent recycling capabilities which make them an increasingly popular choice.

This follows the long-time use of steel roofing in commercial construction where steel has built undisputable quality and performance records.

Steel can be used for every type of building

Architects, engineers and commercial and residential property owners all benefit from the advantages of steel roofing. Today, homeowners across Canada are choosing attractive and durable steel roofing systems for all types of single family homes, multi-family dwellings, retirement homes and more affordable housing projects because of its numerous advantages.

From the steel mill to your roof, quality comes first

The sheet steel used in steel roofing panels meets every exacting standard. The steel is processed through a hot dip metallic coating operation, coating the sheet steel with a layer of zinc or aluminum-zinc alloy providing the base corrosion protection. This is followed by a factory-applied pre-treatment, primer and finish coat. Then, the steel roofing panels are manufactured by a cold forming process in which flat sheets of pre-painted steel are put through a roll forming or stamping operation which shapes the steel into a variety of aesthetically pleasing profiles. The thickness of the panel can change to meet structural requirements and panel lengths can be precisely cut to order, minimizing the number of joints and seams.



Steel's many benefits

- Aesthetically pleasing roof designs and colours
- Long lasting and durable
- Non-combustible
- Energy efficient
- Low maintenance
- Resistant to decay, discolouration, mildew, wind, water, snow and ice
- Environmentally friendly
- Increased home resale value

For the homeowner

- Competitively priced in a growing market
- Faster installation and earlier occupancy
- Wide selection of designs, colours, thicknesses and accessories
- Assorted matching trims, flashing and formed accessories
- Adapted to steep and low slope roofs
- Consistent in quality
- Lightweight
- Easy to install, will not warp, curl or split
- Ideal method for re-roofing existing roofs

For architects and designers

- Broad spectrum of design opportunities for steep and low slopes, dormers, valleys mansards and more complex roof profiles
- Wide selection of colours, shapes, textures and shadow patterns
- Low life-cycle costs
- Fire resistant
- High quality material and enhanced appearance in one product
- Good technical design support from the steel roofing industry



Environmentally friendly

Because steel is entirely recyclable, chances are the steel roof installed today is partly made of recycled steel. In addition, the coil coating process of steel panels is efficiently and ecologically managed. You can refurbish the steel of an old roof rather than adding to the volume of waste in a valuable landfill site, and steel is an excellent product for “sustainable” construction.



Colours for all seasons and all tastes

Steel roofing panels are offered in a rainbow of attractive colours and various thicknesses to blend in with other building materials and the surrounding neighbourhood. You may wish to accentuate the design of your home with bright colours on a steel sloped roof. On a lower sloped roof, you may wish to maximize colourfastness by using lighter coloured steel panels that will reflect heat.

Fire resistance with non-combustible steel construction

Steel roofing panels will not spread fire and flame and will resist the heat from windblown sparks from your own or the neighbour's fireplace without apparent damage.



Vertical rib formed roofing

This type of roof requires profiled steel sheets to be fastened to the supporting structure with matching coloured screws. Normal panel widths are 30 inches or greater and can be supplied in custom fitted lengths.



Standing seam roofing

This type of roof is characterized by a linear shadow pattern which varies in the spacing and design. The ribs or standing seams can be flat and hidden or wide battens. Design and anchoring systems vary from one manufacturer to the other and the height, width and colour of these standing ribs will give each roof its own personality.

Tile design roofing

This type of roof is made of pre-painted steel panels formed to create the appearance of European-style clay or concrete tiles often used in residential construction. Wide sheet widths and long lengths available in a wide range of colors and textures eliminate the joints found in clay and concrete tile roofs. In addition, their lighter weight represents considerable savings in the construction of the roof structure.



Steel Shingles

Steel shingles are designed as an alternative to common asphalt shingles, but with toughness and long-lasting qualities of high-strength steel roofing panels. They are lighter than asphalt shingles, concrete and clay tiles, cedar shakes and slate roofing. Steel shingles will not rot, curl, crack, break, chip, peel or perforate under normal use and minimal maintenance. There is a wide variety of colours and textures available.



Peace and quiet under a steel roof

When steel panels are installed over a plywood surface covered with roofing felt on a residential roof, or over the old asphalt shingles of an existing roof, steel roofs are as quiet indoors as other roofing materials under a heavy rainfall. The standard thick insulation of any attic will also absorb the noise from the falling rain.

Cost effectiveness

Roofing costs must not be judged strictly on the initial cost of purchase and installation. The cost of any roofing system must be assessed over its entire lifecycle and its years of service taking into consideration such factors as:

♦ **Effective roof life:** The cost of replacement and repair of other materials over the lifecycle of the home can be very significant and far exceeds the initial cost of the first roof.

♦ **Disposal fees:** When the old roof is too worn to serve a useful purpose and reroofing becomes an obligation, there is a cost to removing and disposing of the old roofing materials, possibly in an open landfill site thereby adding to the initial cost and contributing to increasing construction waste and pollution. Since reroofing with a steel roof does not require removal of the old roof, there is no such disposal cost with steel.

♦ **Resale value:** Steel roofing makes economic sense and adds value to your home, and prospective buyers will take notice of this feature when the time comes for you to sell.

♦ **Environmental costs:** Steel is completely recyclable and you can be assured that, as long as someone is aware of it, your steel roofing panels will never be landfilled because scrap steel is a valuable material used to produce 'new' steel.

An ideal material for reroofing

Steel roofing is the ideal alternative to all other roofing materials when faced with the decision to replace a worn or leaking roof that has served its time. The existing structure will likely support a new steel roof without additional supports. Moreover, the long lengths of steel panels are quickly installed no matter what the weather conditions without disrupting the household's activities.

For more information

Should you need more information concerning guarantees, technical design and installation assistance, visit our website www.SteelRoofSource.com

