



Squirrel Construction Ltd.

2022 Deck Catalogue

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PART I: Getting Started

Obtaining a Permit:

- Any decks over 24" high greater than 36sqft require a building permit.
- Measurements greater than these are only permitted the "buildable area" of your yard. This is defined by 25' from the rear and 4' from the sides of the property lines.
- In order to apply on your behalf, we require a copy of your Homeowners statement.
- Our permit fee is \$250 for a single level and \$350 for complex, multi-level, deck. This fee includes requisition to, and verification of, inspection including correction to all, if any, defects present.
- Engineered approved plans may be required by the city if your deck is greater than 300sqft or will have a roof or hot tub in the future. Other designs may require engineered plans.

Documents include:

- Site plan
- Elevation plan
- Construction plan
- Home Owners Statement

<https://winnipeg.ca/ppd/Documents/Brochures/Wood-Decks.pdf>

Fabric & Gravel Prep:

- Landscaping fabric (weed barrier) and ¼ down limestone base graded away from your house.
- Surface pad foundation require fabric and gravel. When using ground hog screw pile foundation this is an optional feature but advisable if you plan to use the area underneath for storage.

Ledger:

- What is a ledger? This key component is securely mounted to the side of the house using either 3/8" lag screws (into the rim board) or Concrete anchors (into the foundation). Most newer homes have a ledger board pre-installed. If not, we can easily install one for you. Without a ledger a minimum of two beams will be required to support the structure. This scenario is called non-attached, or a floating deck, but does not have any influence whether a permit is required.

Figure 1: Ledger Board



Ledger board installed by home builder

Foundation:

- If the bottom of the joists measure over 51" from the ground an "engineered" foundation such as screw piles or concrete piles is required.
- Regardless of height we recommend using ground hog screw piles.



- Ground-hogs, commercially known as screw piles, are manufactured locally by New Order Enterprizes. Their groundhog anchor support system is the engineering equivalent to concrete piles but superior in several categories. These include, but not limited to, adjustability, affordability, portability and adaptability. We most commonly use their #89 model. Categorized as a medium-duty helical steel screw pile foundation rated for 3000lb capacity per unit.

Figure 2: Ground hog installation



Fig:

- Other options include surface pads and adjustable pylex uprights. These are adequate to meet building code but guaranteed to shift over time as the deck or ground settles. The adjustable uprights make it easy as turning a wrench to raise an lower the deck when shifting occurs.

Figure 3: Alternative foundation systems



Surface pads Pylex adjustable uprights

PART II: Your Deck

Framing:

- All decks (cedar, pressure treated or composite) framing will be built using pressure treated lumber. Size and shape will dictate the size and spacing required as shown on page 16 of the city deck brochure. Fasteners include structural or lag screws, nails and hanger nails where required.

Direction of Boards:

- Boards by far most frequently run parallel to the house, however can also be positioned perpendicularly, diagonally or even with a fishbone pattern. Direction of boards can add character to your deck, but the surface is often covered with patio furniture and goes unnoticed. Let us know if you have something unique in mind.

Joints:

- Material available dictates if joints will be required on the surface. It is our objective to never use them unless absolutely necessary (typically only when decks are greater than 20' long) and when they are joints will be staggered every 4', and/or 4th board, to evenly blend them into the surface.

Figure 4: Decking



(a) Barefoot Brown 2x6 material, parallel to house, Staggered Joints

Perimeter Board:

- All decks include our signature 2x6 “perimeter” board encapsulating the surface on all outside edges. The result provides a uniform edge concealing the butt ends of the deck boards. This 1” over hang is consistent with the nosing on the stair treads.
- When using composite decking we suggest using an accent color for the perimeter board as well as the fascia.

Figure 5: Signature Perimeter Board:



(a) Angled edges

(b) 90 degree corners

(c) composite decking

Pressure Treated Decking:

- Fasteners: All 2x6 deck boards are fastened with 3" ceramic coated screws.

Maintenance:

- Manufacturer recommends letting the wood "Season" for a minimum of 3 months before applying any product allowing moisture to escape. After seasoning we suggest either a clear coat or "translucent" stain to absorb into the wood.
- With proper care pressure treated lumber will last upwards of 20 years.

TREX - Composite Decking:

- Maintenance free
- Hidden fasteners system
- Requires additional framing that wood decks with joist spacing on 12" centers
- Most composite decks use aluminum railing when railing is required

Figure 6: Trex Composite Decking



(a) Saddle Brown with white fascia



(b) Gravel path/Winchester Grey

More colors are available at <https://www.trex.com/inspiration/colors/>

PART III: Stairs

Construction:

- Each step is comprised of two 2x6 treads and “closed in” by one 2x6 toe kick supported by 2x10 stringers. All stairs come as a standard depth of 9.5”. See figure (a) below.
- Deeper steps, at 11” shown in figure (b) are available upon request with upgrade to using 2x12 stringers and 2x8 toe kick.
- In both cases, double stringers are used on each end for the “return” boards to match the perimeter board. Building code requires all steps be uniform height measuring between 6 and 8 inches.

Figure 7: Stair tread depth



(a) Standard 9.5” deep (2x10 stringers, 2x6 toe kick)

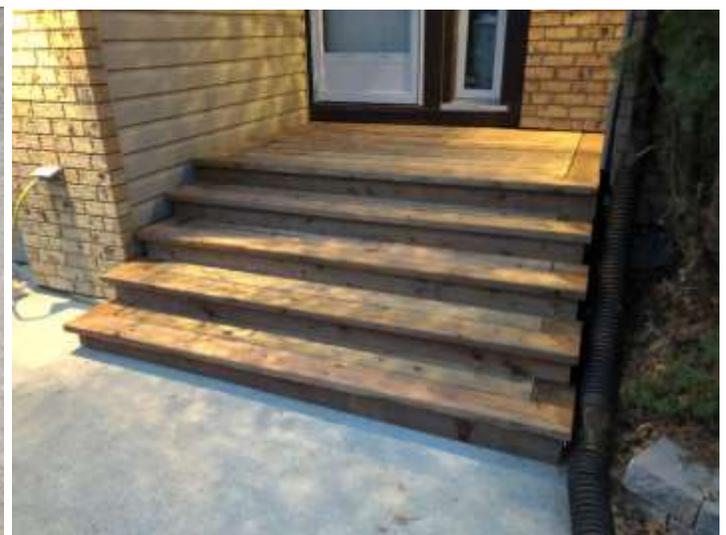


(b) Oversized: 11” deep (2x12 stringers, 2x8 toe kick)

Figure 8: Single sided Stairs



(a) Standard tread depth and height



(b) custom “shallow” step height

Figure 9: Multiple sided stairs:



(a) 2-sided



(b) 3-sided



(c) complete wrap around

- Where the stairs meet the ground is the most important part of their construction. This is where they transition from deck to yard space and we want the transition to be seamless as possible. Whether you have existing grass or patio stones for them to land on, or your yard is unfinished here are some different options of what they can land on:

Stair Landing:

Figure 10: Stair Landings:



(a) Existing Area



(b) Patio stones – open skirting



(c) “Framed” Patio stones – closed skirting

Box Steps:

In order to keep the deck under 24” high we can use a single, double, or as many steps necessary to ascend between the deck and the door. Keep in mind: more steps take up more room on the deck

Figure 11: Box steps (no stringers)



(a) 5-sided platform with 1 step all the way around



(b) 3-sided 2-steps

PART IV: Railing

Safety Rail:

- By code any deck over 24" high requires 36" railing with any spacing less than 4" wide. Note that decks over 72" high require 42" high railing. Our most commonly selected options include either wooden or black aluminum balusters as shown below.
- Please inquire for more options available or if you have a photo of something you would like to match.

Figure 12: Railing options



(a) 2x2 wood spindles

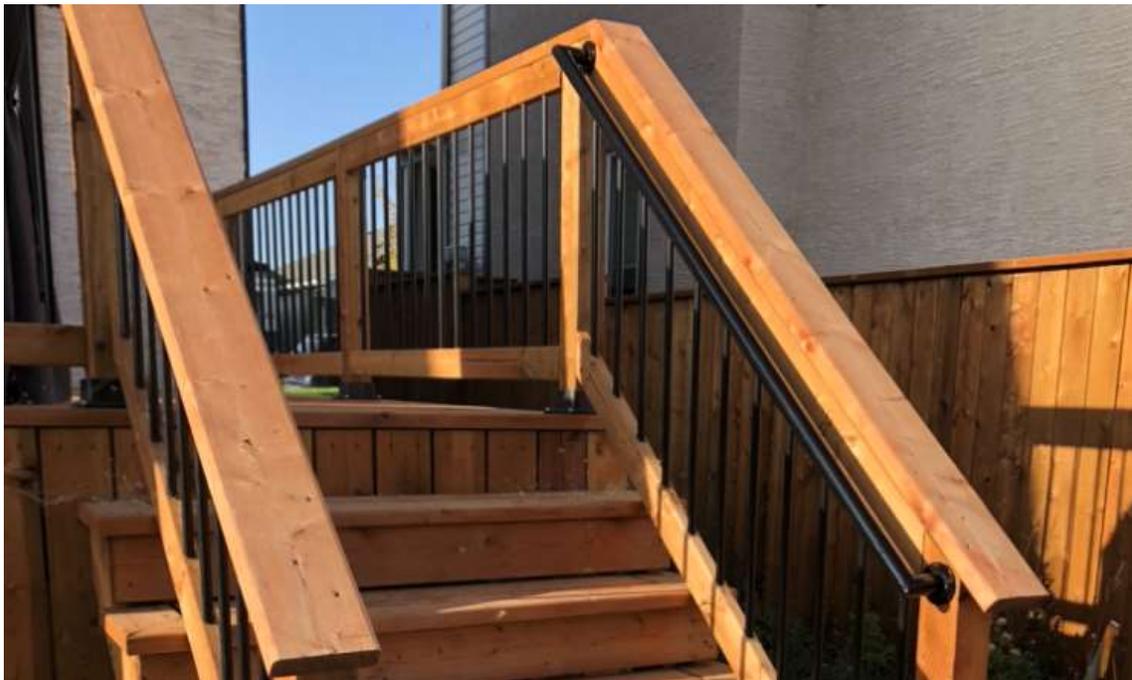


(b) 3/4" black aluminum (square or round)

"Graspable" Handrail:

- City code requires a "continuous" and "graspable" handrail along one side of the stair railing.

Figure 13: Graspable Handrail

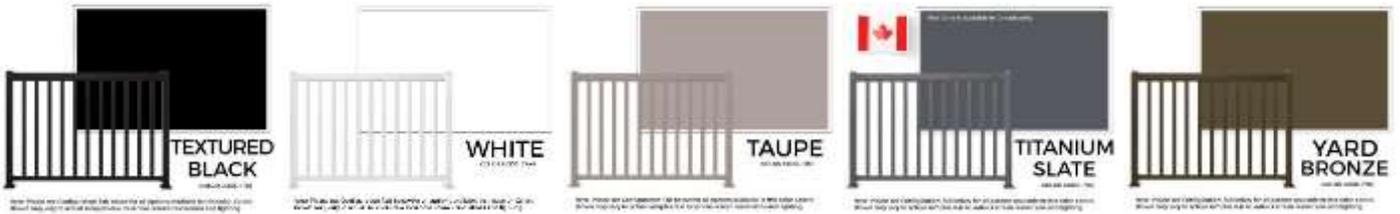


Graspable handrail mounted to right side of stair railing

Regal Railing:

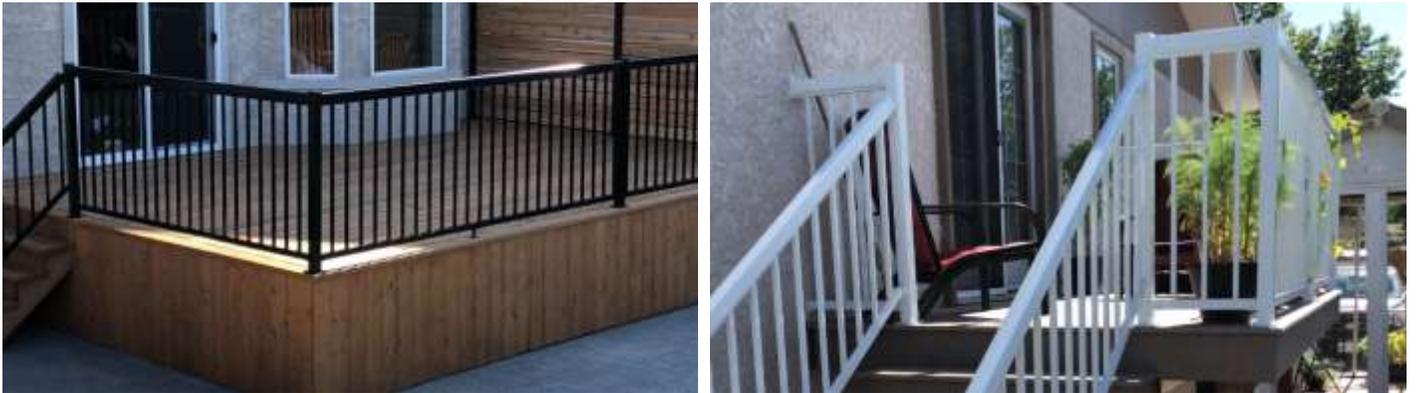
- Maintenance free railing, comes standard 42" high, but also available in 36" by special order. Most commonly used with $\frac{3}{4}$ " square pickets and < 4" spacing. Several colors, wider pickets, glass inserts and LED lighting available upon request.

Figure 14: Regal Railing color options:



More info available at: <https://Regalideas.com>

Figure 15: Regal Railing



42" high Black (left) or white (right) both with $\frac{3}{4}$ " square pickets

Figure 16: LED Lighting:



PART V: Accessory Structures

Skirting:

- Vertical 1x6 fence boards with optional trim (to conceal uneven landscaping) on bottom.
- Your deck may also provide useful storage space underneath. We offer access doors hinged to open vertically (so that it will never sag) with a latch to maintain a closed position and an internal draw string to operate latch from underneath.
- Skirting often wraps around the deck but deck remains open under the stairs. See figure 8.

Figure 17: Skirting – Pressure Treated



(a) Vertical 1x6 fence boards

(b) fence boards with lower trim

(c) access door

Figure 18: Skirting - Composite



Matching composite trim with PVC lattice

Privacy Walls:

- Add privacy, shade, or just the cozy atmosphere you're looking for with a privacy wall. Building code allows you to build 13' high (off the ground) but we often build them 6' from the surface of the deck. Here are a couple popular options to consider:
- Unlimited patterns, cut-outs and designs available upon request.

Figure 19: Privacy walls



(a) Wood railing w/ alternating width of boards

(b) HOFT systems with Cedar 5/4" thick boards

*HOFT systems can also be used with composite boards.

Pergola:

- Define your space by adding a pergola over head. It creates an indoor feel to your outdoor space
- Hang lights, vines, or sun shades
- Endless configurations, and profiles, of boards available.

Specs often include:

- Two pairs of 2x8's, parallel to each other with 2x6's running perpendicular to them
- Additional layer of 2x4's with even or creative spacing between
- 3.5" wedge profile on 45 degree angle on all projections. Other profiles available upon request

Figure 20: Pergolas

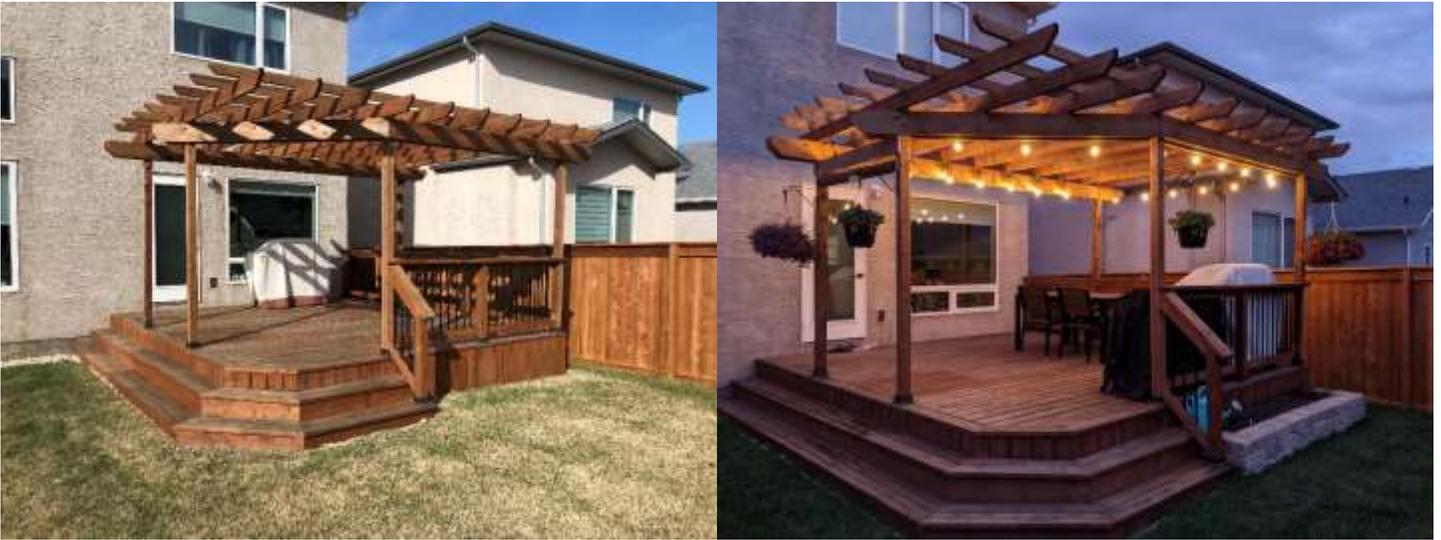


(a) Single Layer 2x6 (w/45 degree profile)

(b) Double layer 2x6 and 2x4 (w/custom profile)

Retail Products:

Figure 21: Lighting - Ove



Lighting can transform your deck into a romantic escape

<https://www.ovedecors.com/us/lighting/outdoor-lighting.html>

Figure 22: Sun Shade - Coolaroo



Sunshades provide privacy to transform your deck, or yard, into an intimate setting

<https://www.coolaroousa.com/product/wand-operation-outdoor-roller-shade-in-95-uv-block>

Squirrel Construction Ltd.

For more info please visit www.squirrelconstruction.com/decks/