



SILVERTHORN PLANS



CREATING A FLAGSTONE PATIO

How to Start

What kind of patio are you trying to create? How big would you like your patio to be? Will you be using natural or manufactured stone?

Take the time to do some research. Look at different designs and styles and see which ones suits your taste, budget and purpose. We have many design booklets available at Silverthorn Land-scape Supplies to give you great ideas.

Get your measurements! Write down your length, width, and height. Will there be any water features built within the patio, or will it be one continuous flow of flagstone? Would you like a border of a different style, if so, how wide? Would you like a design featuring different coloured flagstone in the middle? Write down all measurements and be sure to include slopes and any differences in grade throughout the area you are planning to build on. Would you like to mortar the joints or use Polymeric Sand?

Sketch out a plan. It is important to get your ideas down on paper. This helps when communicating your ideas to others so that everyone is on the same page. Be sure to include your measurements! Write down specific products that you know you'd like to include.

How much will you need? See our Formula & Calculator page to figure out how much product you will need. If you need assistance figuring out how much is needed for your project feel free to come in or call us anytime.

Getting your products: Will you be picking them up, or getting them delivered? Either way, it is important to come in or call us ahead of time to ensure we have the products in stock and or a delivery spot available for you.

TOOLS YOU MAY NEED



paper & pen



tape measure



stakes & string



marking paint



square



level



shovel



wheelbarrow



rake



gloves



safety glasses



knee pads



rubber mallet



hose



hand tamper



broom

Additional tools

- 4' piece of 2x4 wood*
- 2 pieces of 3/4 - 1" pipes*
*for leveling purposes

PRODUCTS YOU MAY NEED

flagstone (style of choice)	A-gravel	limestone screenings	paver restraints	metal spikes	polymeric sand
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*Note: There is a new product called Advanced Performance Bedding which can be used in place of A-gravel and Limestone Screenings. APB is specially designed to self-compact, while still allowing for proper drainage. Using APB eliminates the need to tamp your base every 2" .. For more information on APB, or to learn more about when to use it versus A-gravel and Lime-stone Screenings, come in or give us a call.

Optional Additional Machinery

- Skidsteer • stone saw

*Make sure you are qualified to run any equipment you may rent, or have someone who is experienced with machinery come out and help.

INSTALLATION

1. PLAN

Go through the How to Start list, make a good plan, be sure to include your measurements, which type of product you need, and quantities.

*When picking out your product it is important to get flagstone that is a minimum of one inch thick for patio uses. You can go thinner, however, you then run the risk of breaking the flagstone.

2. PREPARATION

Mark out the area to be excavated.

*Remember to call the appropriate utility companies to find out where any lines may be buried before you dig! Phone, cable TV, internet, gas, hydro, waterlines, city piping...etc.

3. EXCAVATE

Excavate the area a minimum of 6"- 10" deep (depending on your exact project type). Be sure to remove all loose soil. Your sides should be excavated a minimum of 3" wider than the area you are laying the flagstone on.

4. BASE

Place A-gravel into the excavated area, compacting every 2". Grade the base as close to the final outline of your project as possible. Continue to add gravel and tamp every 2" until height requirements of your project are met. Be sure to slope all installations away from buildings, for drainage purposes. (Minimum slope is one inch across every ten feet). Your gravel base should stop 3" (roughly) below desired finished height of the patio.

5. SCREENING

Once a solid A-gravel base has been compacted it is time for Limestone Screenings to be put down. Lay ¾"-1" diameter pipes on top of the compacted base so that when your flagstone is laid they will be 3/8" above desired finished level, then put down Limestone Screenings. Level the screenings evenly by pulling the 2 x 4 board across the pipes. Once screenings are level, re-move the pipes, and fill in the holes with additional screenings.

6. LAYING YOUR STONE

Lay your flagstone directly on the bed of screenings that you just leveled. With flagstone you are free to create a uniform and precise look, or lay your pieces in a random pattern to get a much more natural look.

*(If you are doing any banding or accents, place these first before installing your main pattern. Build your main field towards your accent/boarder and cut the flagstone to fit into the design).

7. CUTTING

Depending on the design you chose and the size of patio you are building, some flagstone may need to be cut in order to fit the design properly. Mark your pavers and either cut them yourself* or bring them into Silverthorn and we will cut them for you.

*Be sure to wear the appropriate safety gear and have proper training on machinery when cutting any stone or paver. *See Cutting under our Services for rates

8. EDGING

Once your patio has been laid it is important to install edge restraints to prevent your flagstone from moving laterally. Using Paver Restraint and 10" metal spikes line the perimeter of your patio and hammer the spikes into the compacted base (do not hammer them into the soil as they will not hold).

9. FINISHING TOUCHES

To create a more durable patio, prevent weeds and insects from getting into the joints, and resist erosion in steep slope applications, sweep Polymeric Stone in between the flagstone joints. Fill the stone so it is flush with your flagstone. Whisk off each piece of flagstone so it is free of any Polymeric Stone, and lightly mist your patio with a garden hose to seal the joints.

*Note: Some specialty pavers are not made to be used with polymeric sand

DONE!

There you have it! A beautiful new flagstone patio for your enjoyment!