

1. Measure and Calculate Slate Quantity
2. Prepare the Concrete Slab
3. Cutting and Gluing the Slate
4. Grouting
5. Washing and Optional Sealing

WHAT YOU'LL NEED:

Outdoor paving tiles in slate →

- Measuring tape
- Brush, sponge, cloth
- Primer for the concrete slab
- Drill with a mixing paddle and bucket
- Slate adhesive
- Scriber, awl, hammer, chisel
- Notched trowel (10-12 mm)
- Tile spacers
- Grout and jointing tool
- Sealing product (optional)

1. Measure and Calculate Slate Quantity

The first thing you do when gluing outdoor tiles on a cast slab is to choose the desired slate format and calculate the quantity.

Measure the area to be covered and add about 5 % extra to account for cutting and adjustments.

Outdoor tiles come in varying lengths, meaning the slate has a fixed width but variable lengths. This gives a beautiful, continuous visual flow.

Decide on the desired width and thickness. The most common widths are 20, 30, or 40 cm, and the most common thickness is between 1 – 2 cm.

2. Prepare the Concrete Slab

Once you've measured, chosen the format, ordered, and received the tiles, it's time to prepare the concrete slab.

Remove dust, dirt, and loose particles.

Apply a primer to ensure good adhesion.

Let it dry for about an hour — make sure to check the drying time according to the primer manufacturer's instructions.

3. Cutting and Gluing the Slate

Once the base is prepared, you're ready to cut and glue the slate.

Get an overview of the lengths you have available.

The goal is to achieve a random joint pattern and make the most of the material.

Lay out the first row continuously — trim the last tile to fit. Remember to account for the joint spacing when cutting the tiles.

Tip: For the best possible result and to optimize the slate, always cut the required length from a tile long enough that the offcut can be used as the first tile in the next row. In practice, the offcut should be at least 40 cm long.

Cutting the lengths:

You can easily cut Light Oppdal slate by following the same principle as cutting a glass plate. Therefore, we recommend not using an angle grinder — you'll get a cleaner result without dust and noise!

- Measure the length and score a 1–2 mm deep groove using a scribe or similar tool.
- Mark on the back where the groove is located.
- Place the groove steadily under a short edge and snap it using body weight. If the slabs are thick, use a chisel and hammer along the groove to break the slate.

Gluing:

Now, you can glue the first row. Start by mixing the adhesive. Use a slate adhesive and mix according to the manufacturer's instructions.

You should always double glue slate, meaning you apply adhesive both to the base and the back of the slate to ensure 100% coverage. This is important to avoid air pockets that could later fill with water and cause frost damage.

- Apply adhesive to the concrete slab in a width that matches the tiles.
- Apply adhesive to the back of the slate tile and work it in well.
- Ensure a compact bond by slightly moving the tile as you place it.
- Wipe off excess adhesive immediately.
- Apply adhesive to the slab and begin with the offcut from the previous row. Lay the tiles continuously, ensuring a random joint pattern.

Avoid having vertical joints align with each other (so-called cross joints).

There should be at least 10 cm between vertical joints, and they should be randomly spaced. For the best result, we recommend a joint width of at least 10 – 12 mm. A good tip is to use tile spacers or other markers to ensure consistent spacing.

Let everything cure for at least 1 day. There are also quick-setting adhesives — always check the instructions from the adhesive supplier.

4. Grouting

Now that the slate is in place and the adhesive has cured, it's time to grout.

Mix the grout with a coarse type such as clinker grout or masonry mortar, mixing it to the correct consistency — relatively liquid (wet grouting).

Fill the joints well and wipe away excess immediately. Wipe the tiles thoroughly afterward to avoid grout haze.

Let it cure — check the manufacturer's instructions for curing time.

5. Washing and Optional Sealing

After grouting, all that remains is the final touch — washing and optional sealing.

For the best result, thoroughly clean with water and a scrub brush.

One of slate's many great qualities is that it is self-cleaning with a little help from the weather — slate "breathes." If the area will be exposed to spills, such as from a barbecue, we recommend sealing the area. This creates a shield against all kinds of stains, such as grease and red wine. Liquids will bead on the surface, making them easy to wipe off.

We recommend using an invisible sealer. Be aware that some products on the market have a color-enhancing effect that alters the natural appearance of the slate.

In our video on slate sealing, we show you the step-by-step process.