Nuordic
Human Centric Lighting

PROJECT	TYPE	QTY

INSTALLATION SHEET · ALUMINUM PROFILES · 90° MITER CORNER

Cutting a 90° corner

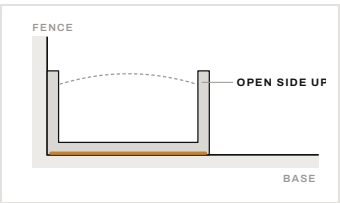
One method for every Nuordic channel.

A mitered joint carries the line of light through the corner without a break. Cut it by hand with a fine-tooth hacksaw in a miter box. The box holds the angle, the fine teeth leave only a light burr, and the method keeps aluminum swarf out of the finished work.

The cut is the same for every profile. Only the seating changes: **the profile goes into the box the way it sits on its mounting surface.**

A · SEATING BY PROFILE TYPE, SECTION IN THE BOX

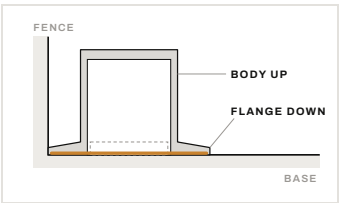
Mounting face. Dashed: lens, removed before cutting.



Surface

NP-S1 · NP-S2 · NP-S3

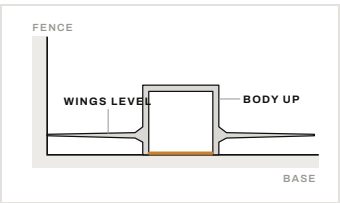
Back on the base, open side up, side against the fence.



Recessed, flanged

NP-E4

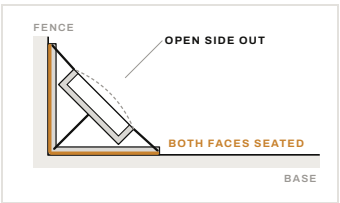
Flange on the base, body standing up, flange edge to the fence.



Plaster-in

NP-P3 · NP-P4 · NP-E1

Wings level, body standing up, wing tip to the fence.

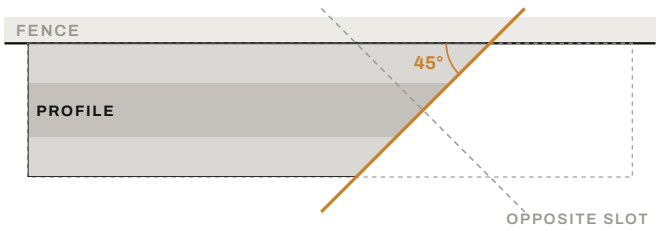


Corner

NP-C3

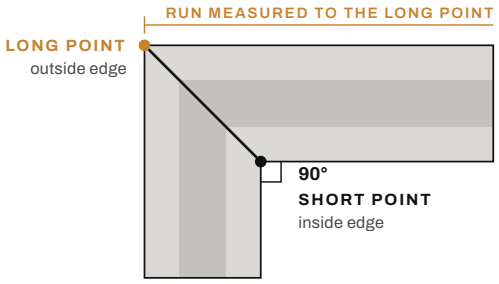
One mounting face on the base, the other flat against the fence.

B · MITER BOX, TOP VIEW



Cut through the 45° slot. The mating end uses the opposite slot, with the profile seated the same way up.

C · FINISHED JOINT, PLAN



Two mirrored 45° cuts close to a tight 90° corner.

RECOMMENDED TOOLS

- **Hand hacksaw** with a fine-tooth bi-metal blade, 24 to 32 TPI.
- **Miter box** with 45° guide slots, rigid, with a snug slot for the blade.
- **Clamp** to hold the profile against the fence.
- **Fine flat file** for deburring the cut face and channel.
- **Square, tape measure** and a fine marker.
- **Safety glasses** and gloves.

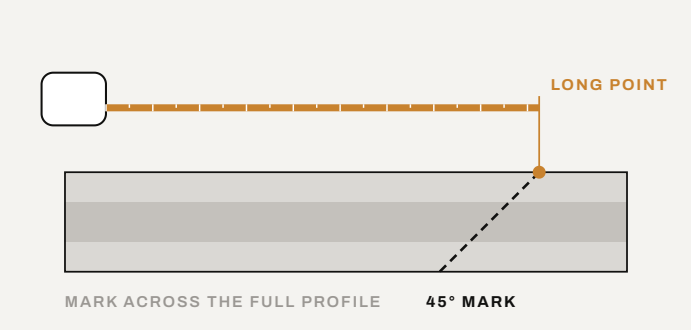
BEFORE YOU CUT

Cut a short scrap first to confirm the blade and box give a true 45°, and that the scrap pieces close correctly for the profile you are using. On an inside corner, measure to the short point of the miter instead of the long point. The two mirrored cuts are the same either way.

Check the profile's spec sheet first. Where its range includes a 90° connector, the connector can replace the miter. A bendable profile such as NP-P3 can follow a radius instead. Check the IP rating too: profiles rated IP20 are for indoor use only.

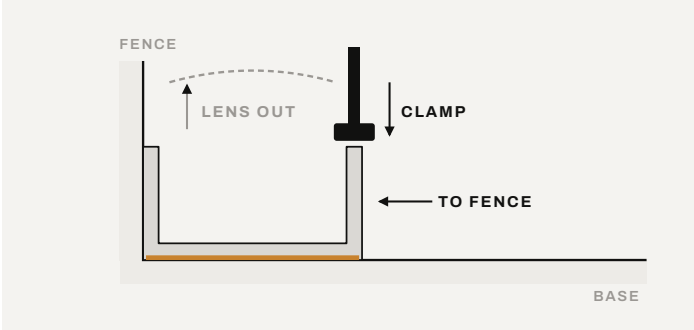
Procedure

Shown on a surface profile. Seat other types as in figure A.



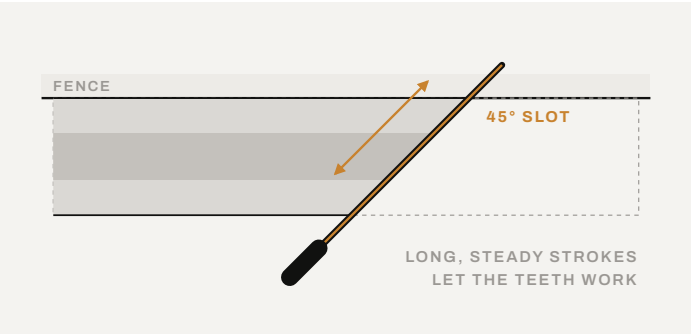
1 Measure and mark

Measure each run to the long point of the miter, the outermost edge of the profile at the corner: the wing tip on a plaster-in profile, the flange edge on a flanged one. Mark across the full profile. Cut slightly long and trim to fit if the wall is out of square.



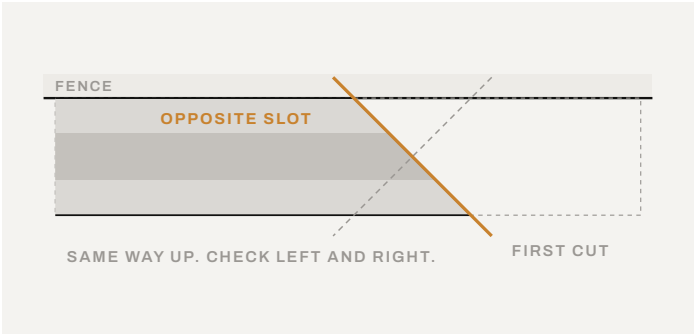
2 Seat the profile

Take out the lens or diffuser. Seat the profile in the box the way it sits on its mounting surface (figure A), press it to the fence and clamp it.



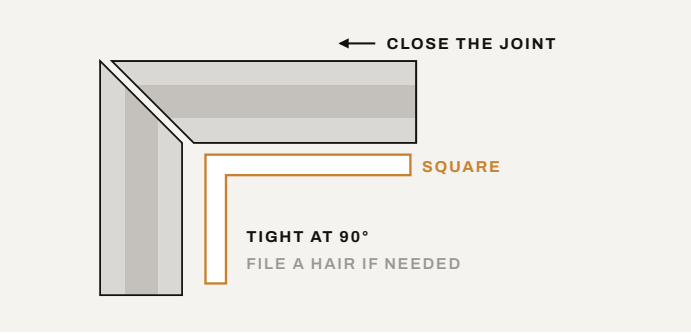
3 Cut the first end

Set the saw in the 45° slot. Start with a light pull back to open the kerf, then use long, steady strokes along the full blade. Let the teeth work. Forcing the saw bends thin walls, wings and flanges, and raises burrs.



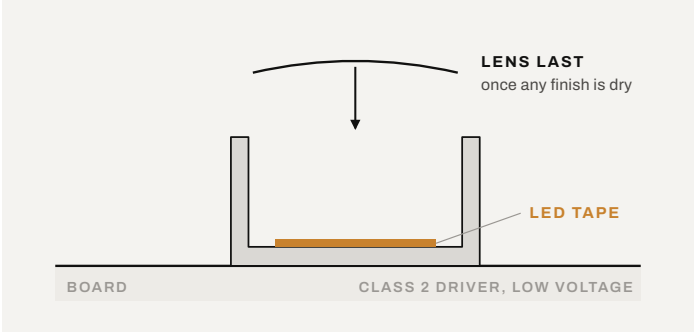
4 Cut the mating end

Move to the opposite 45° slot so the second cut mirrors the first. Seat the profile the same way up. Confirm which piece is the left and which is the right before you cut.



5 Deburr and dry fit

File the cut face, the channel and any wing or flange edges smooth, then wipe away the swarf. Bring both pieces together on a flat surface. The joint should close tight at 90°. Check with a square and take off a hair with the file if needed.



6 Fix and finish

Fix the profile as its spec sheet directs: clips for surface and flanged profiles, or wings fixed to the board, taped and skimmed for plaster-in. Fit the LED tape and lens last, once any finish is dry. Low voltage only, on a remote Class 2 driver.