Renoplast

Brief instructions sheet on how to build a balcony/terrace using the

RENOPLAST K100R ECO+

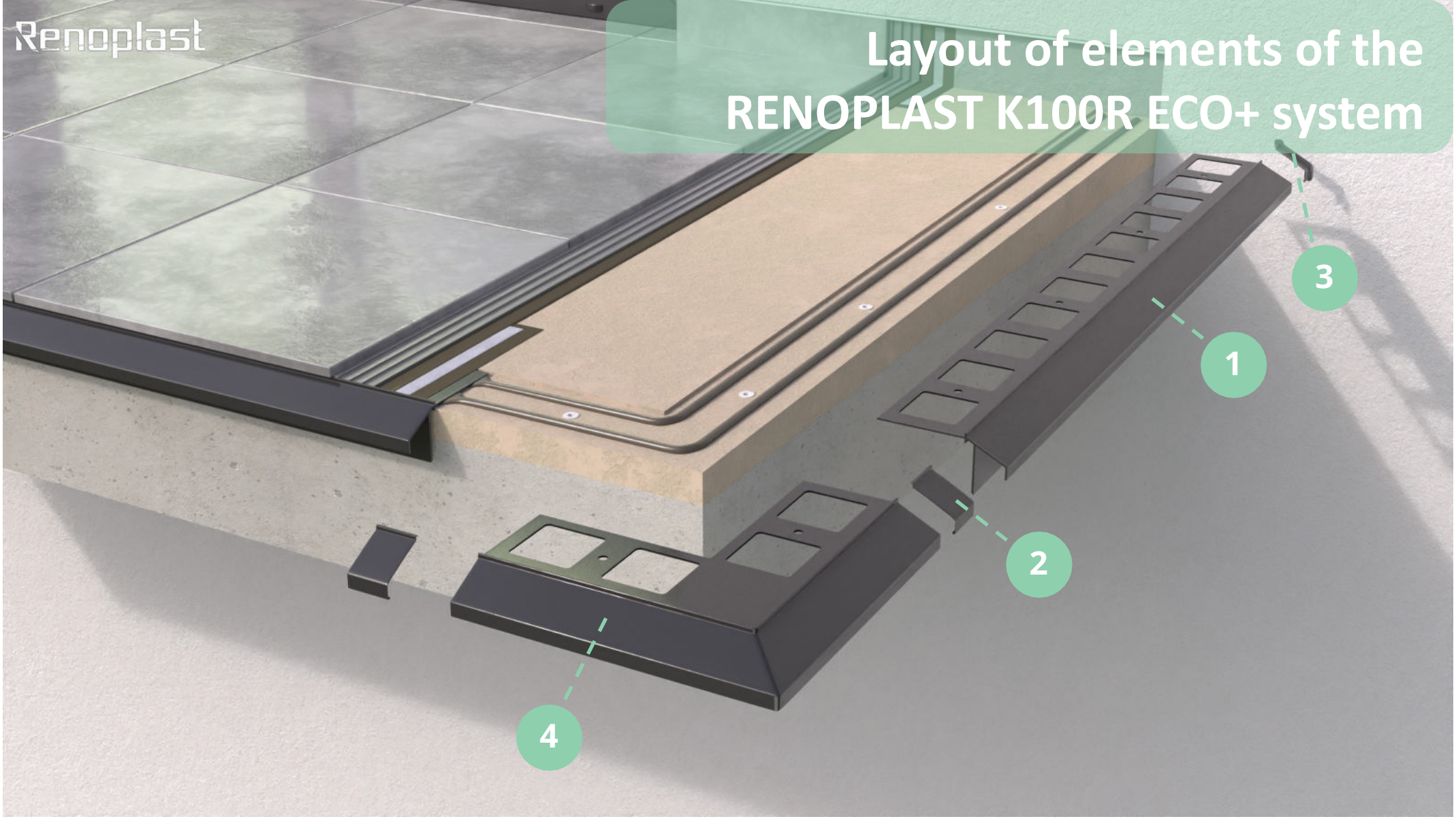
ceramic tile flooring

installed on a mineral-based adhesive mortar

version 07.2023

Renoplast

Layout of elements of the RENOPLAST K100R ECO+ system



Straight profile K100R
length 200 cm

1

Connector
LK100R

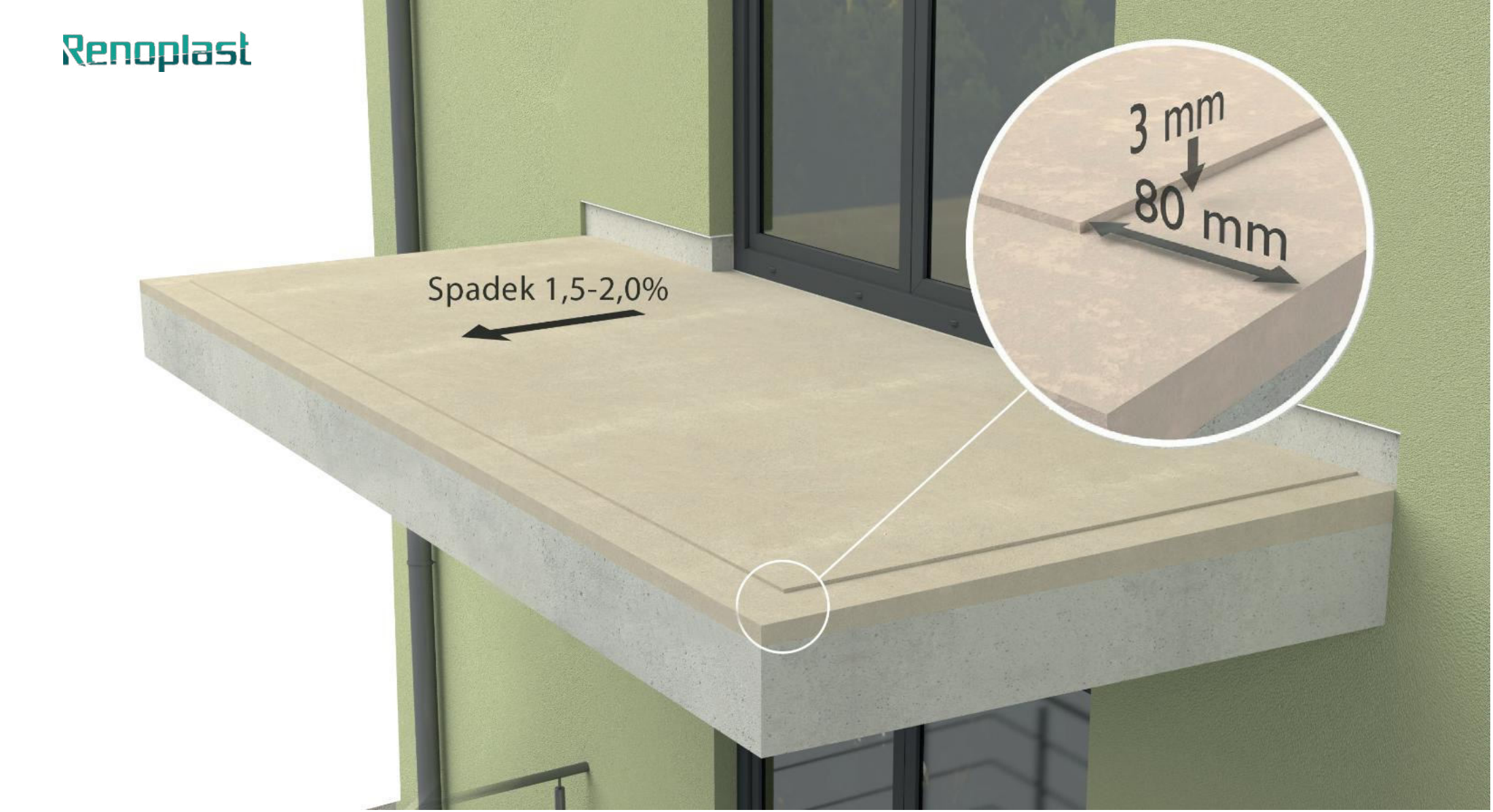
2

OPK100R End stops
(left/right)

3

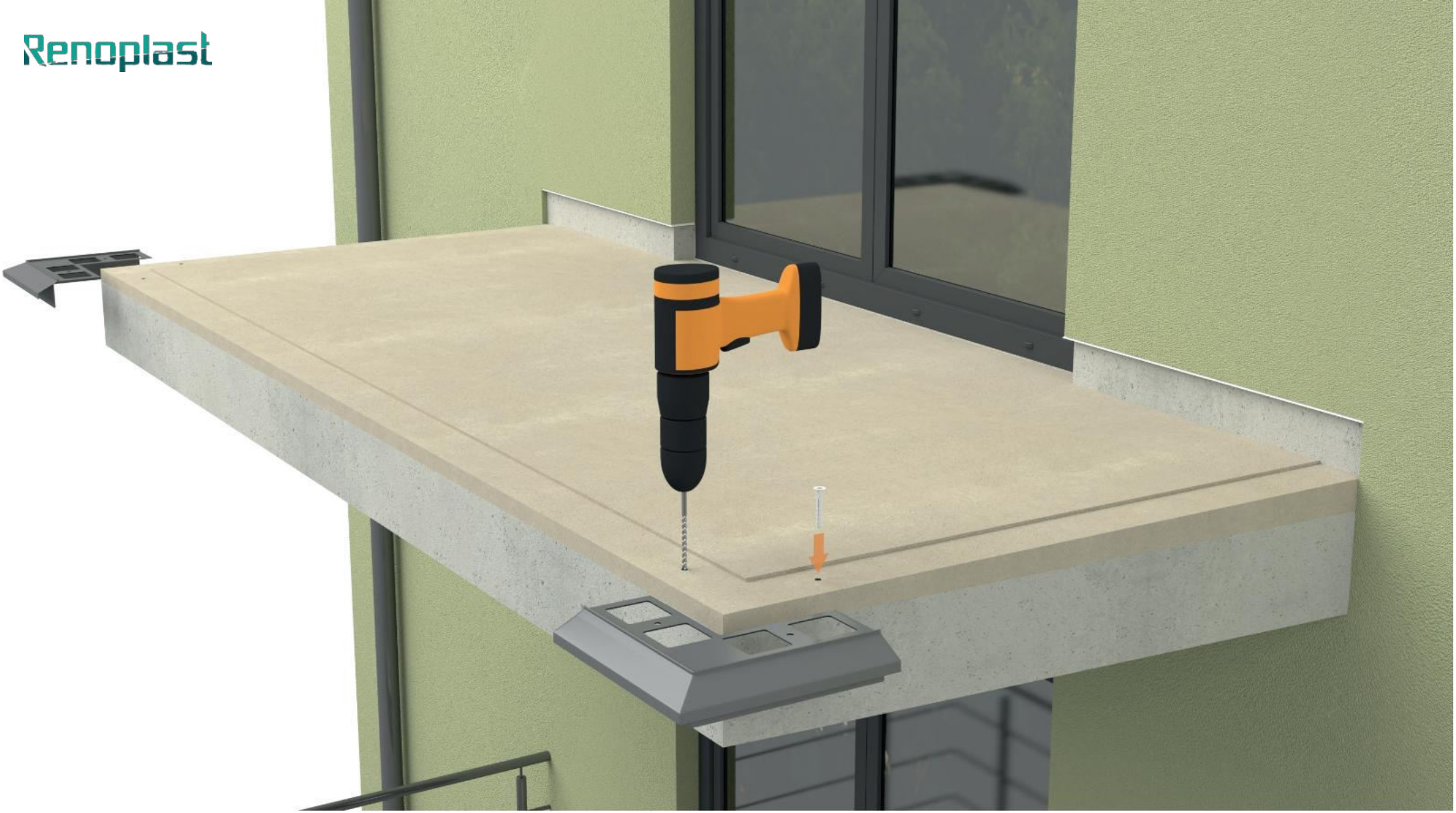
NZ K100R/90
Outside corner 90º

4



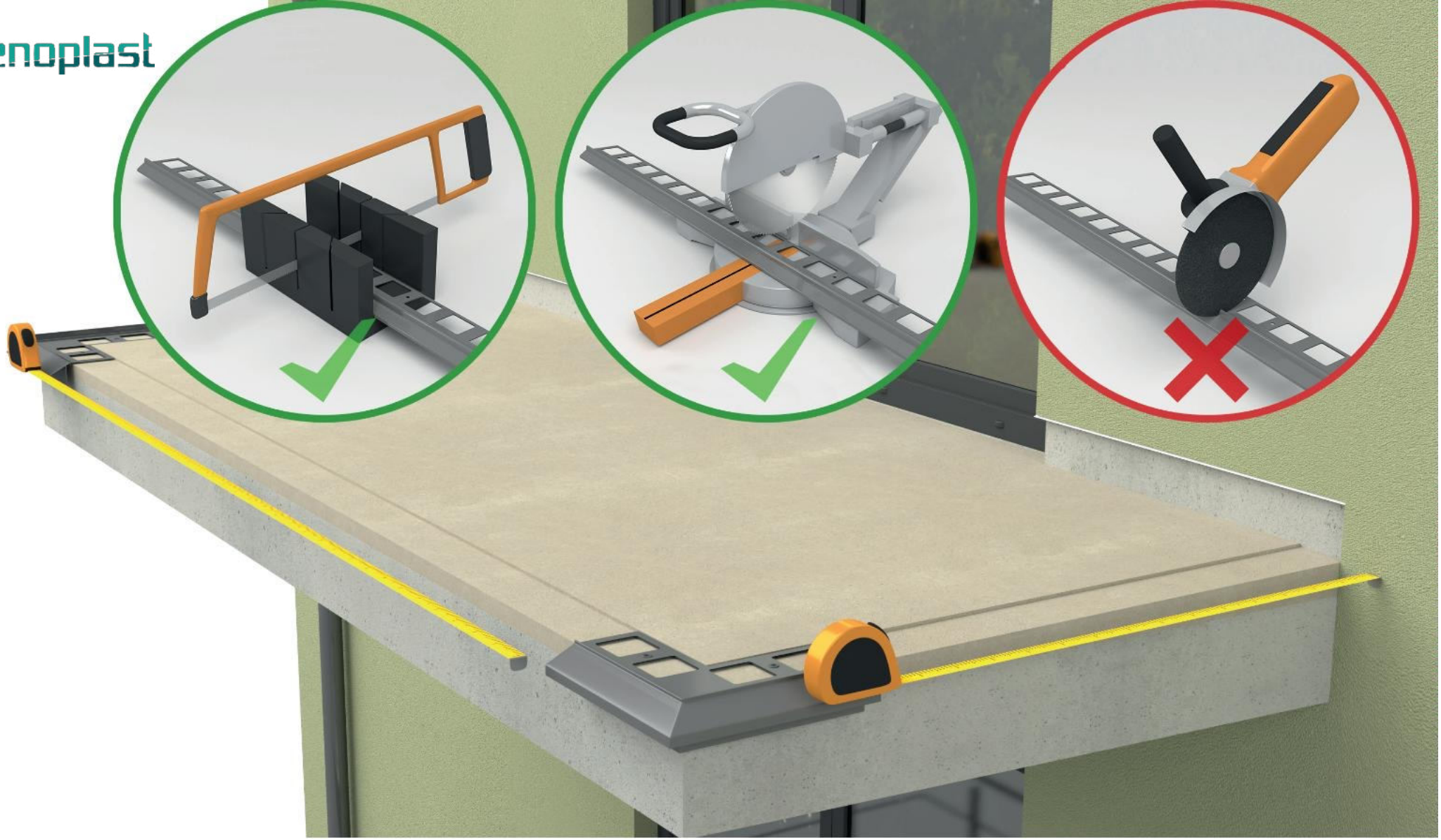
Balcony/terrace floor bases

The base should be even and load-bearing with a slope of 1.5 - 2 % towards the front edge. It is recommended that along the edge underlay on the width of the installed profile of 80 mm, lower the underlay to a depth of about 3 mm so that the installed profile was flush with the plane of the base.



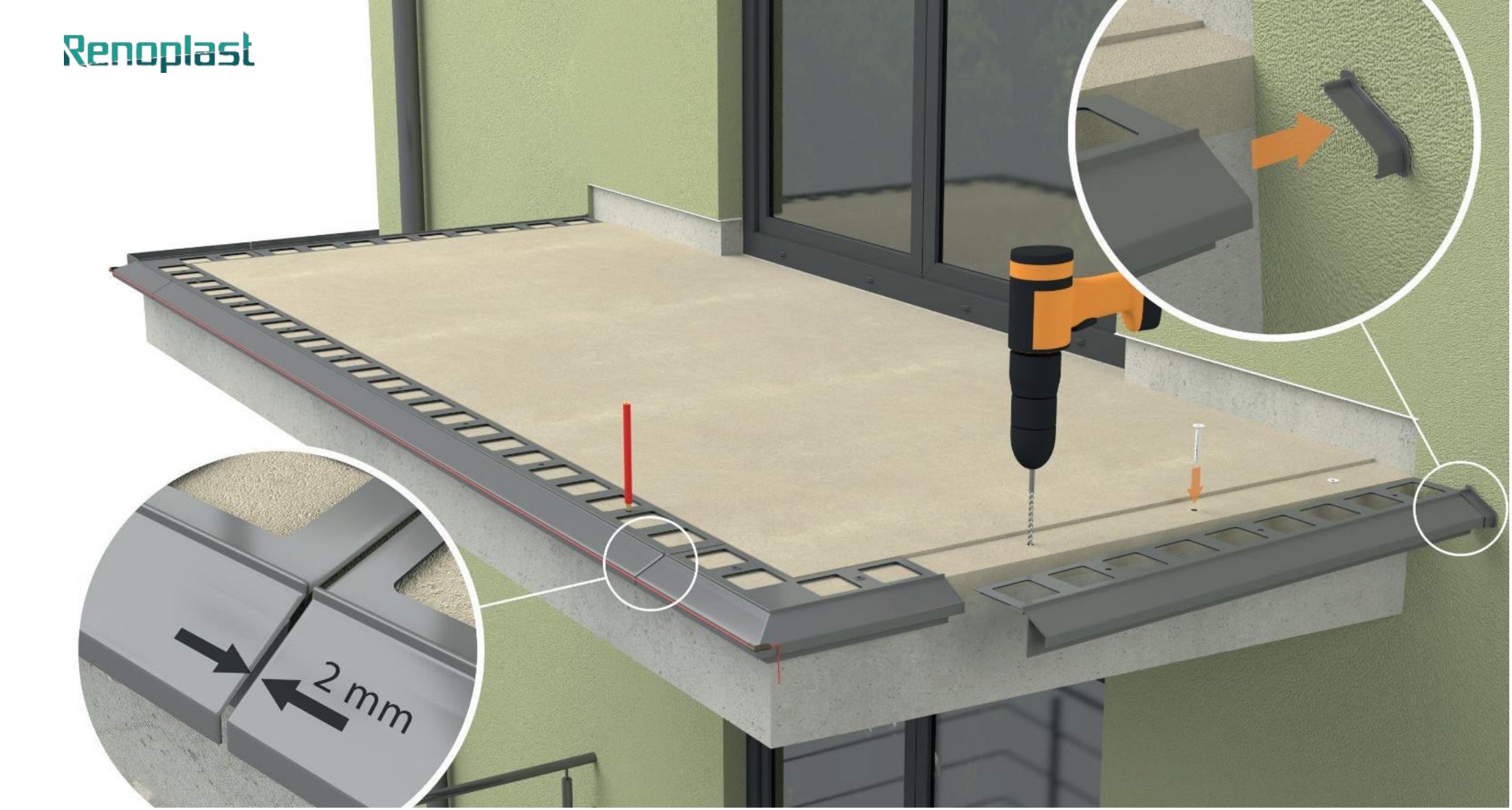
Pre-assembly of NZ K100R/90 corners

We start the work with the initial fixing of the corners, using expansion bolts (expansion bolts included with the corner in the kid).



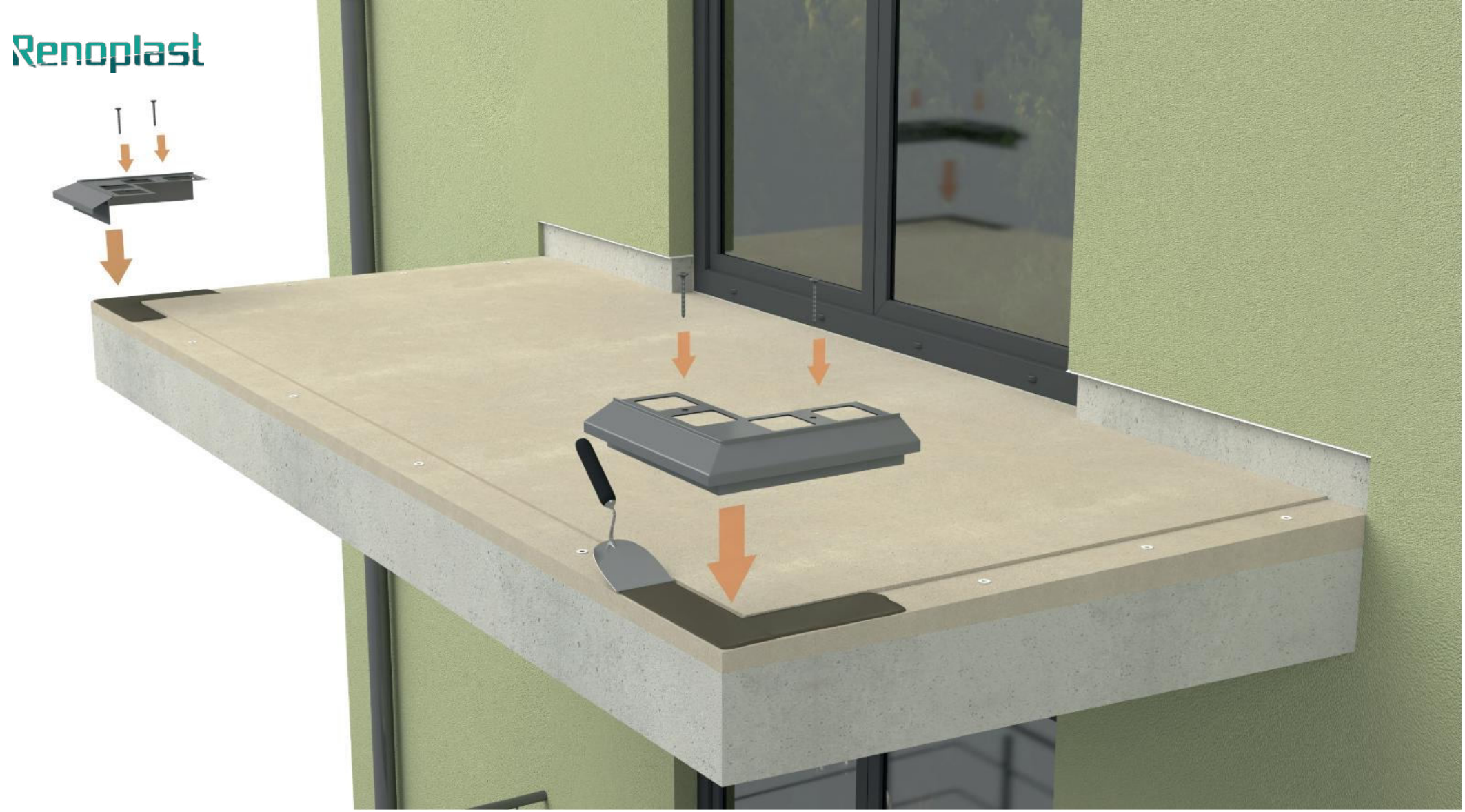
Preparation of straight profiles K100R

The next step is to measure the straight sections to prepare (cut) the straight profiles. The straight sections must be prepared in such a way as to leave expansion gaps of approx. 2 mm at the joints and a space of approx. 2 mm at the wall for the **OPK100R** end stop. The profiles should be cut with a hand-held metal saw or a mechanical saw with a suitable blade for cutting aluminium. Cutting with other tools may cause damage the paintwork, which is not acceptable.



Making the installation holes in the subfloor

Place the **K100R** straight profiles between the **NZ K100R/90** corners and mark the locations for the installation holes on the subfloor. Remove the profiles, then drill the installation holes.

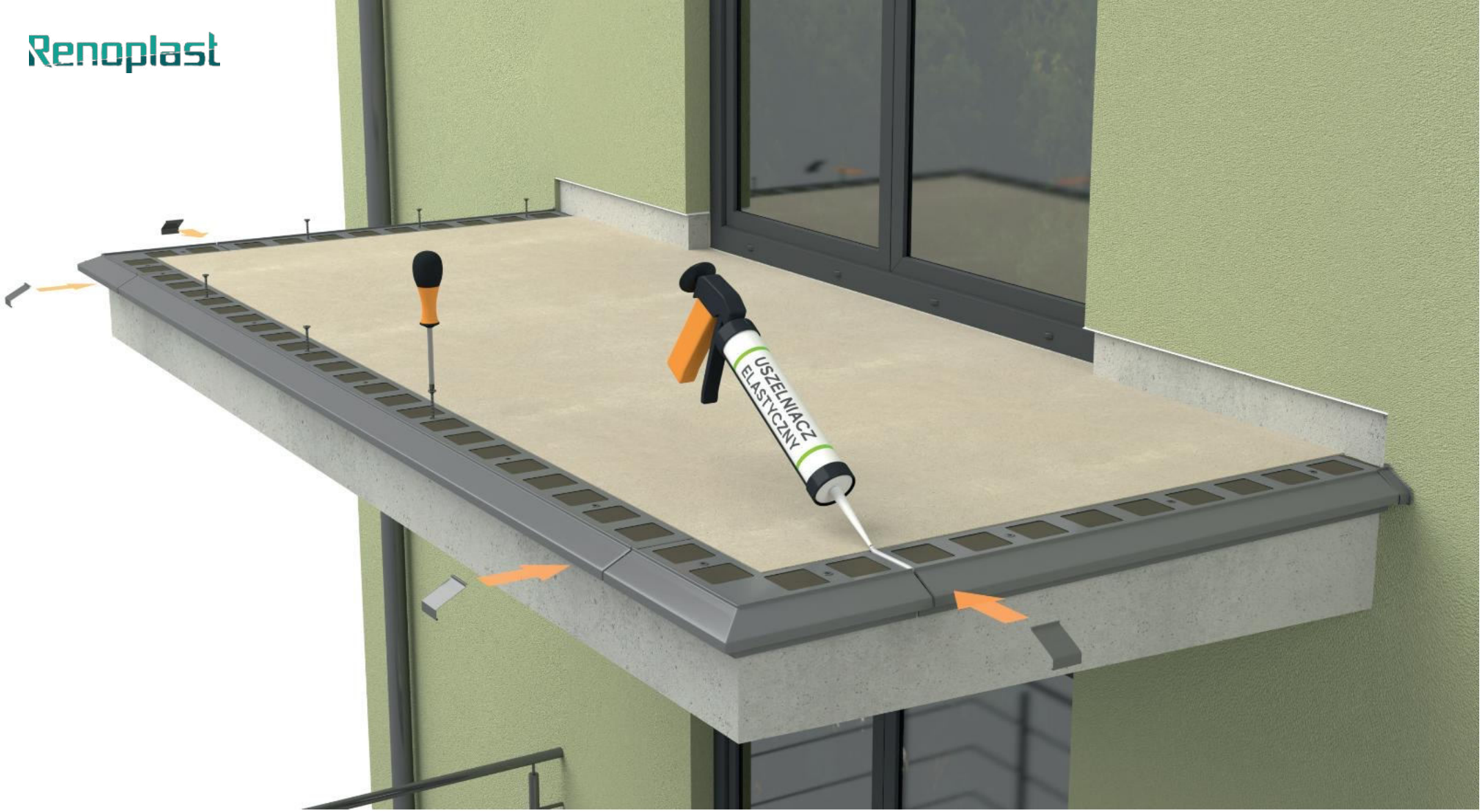


Installation of NZ K100R/90 corners

The corners are placed on a flexible mass (e.g. polyurethane), and then mechanically fastened with the help of pre-installed expansion bolts.

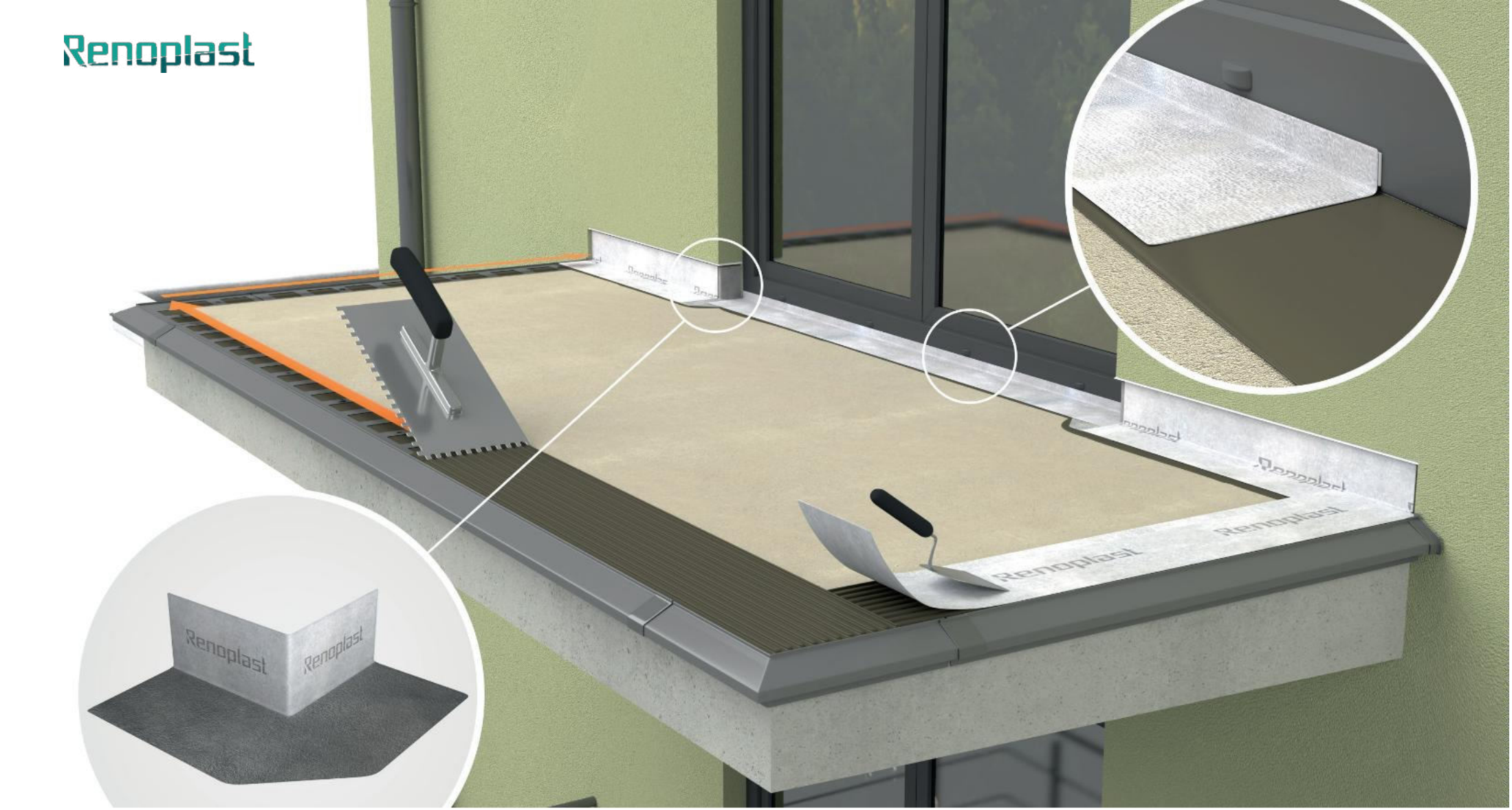
Installation of straight K100R profiles

Straight profiles are set in the same way as corners. Using a string stretched between the corners and spirit level, we take care of their even assembly.



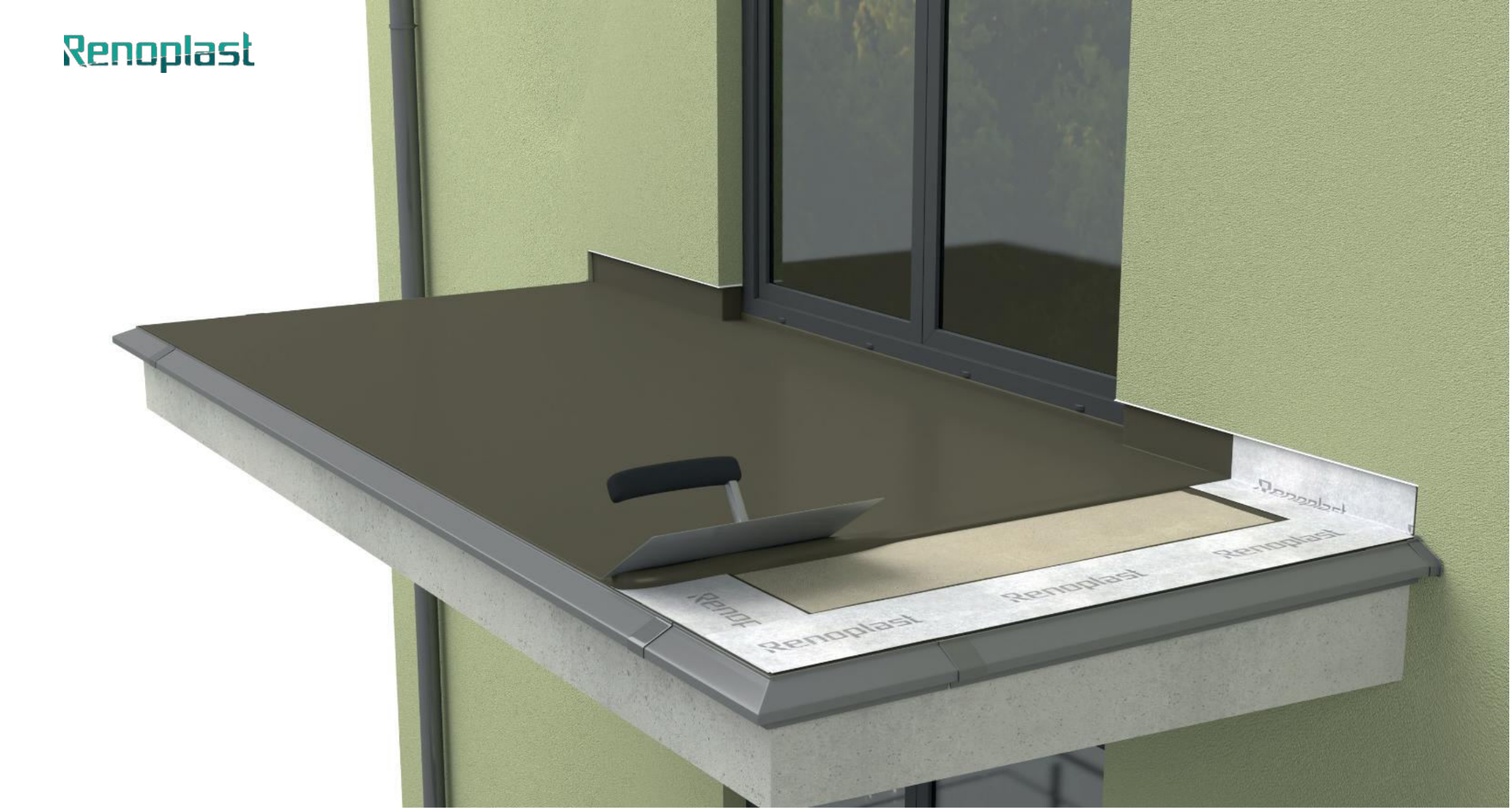
Sealing of joints with LK100R connector installation

The profile joints are filled with a permanently elastic compound (e.g. polyurethane), and the connectors are installed from the outside.



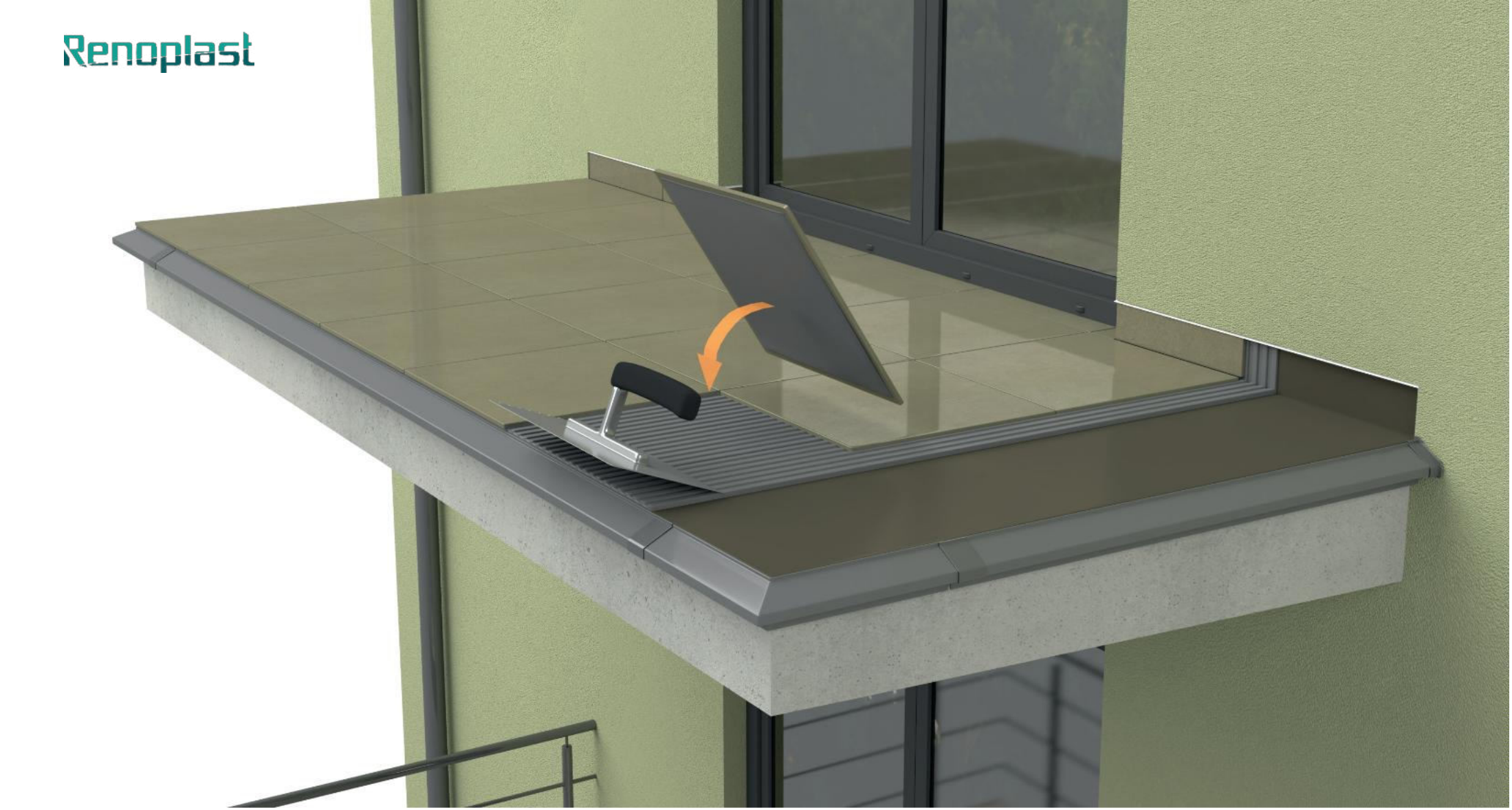
Connection of underlay to profiles and door threshold

The profiles are bonded to the cementitious subfloor with **Renoplast PL3 sealing tape**. The connection to the door threshold is made using **Renoplast PL3 threshold tape with butyl strip**.



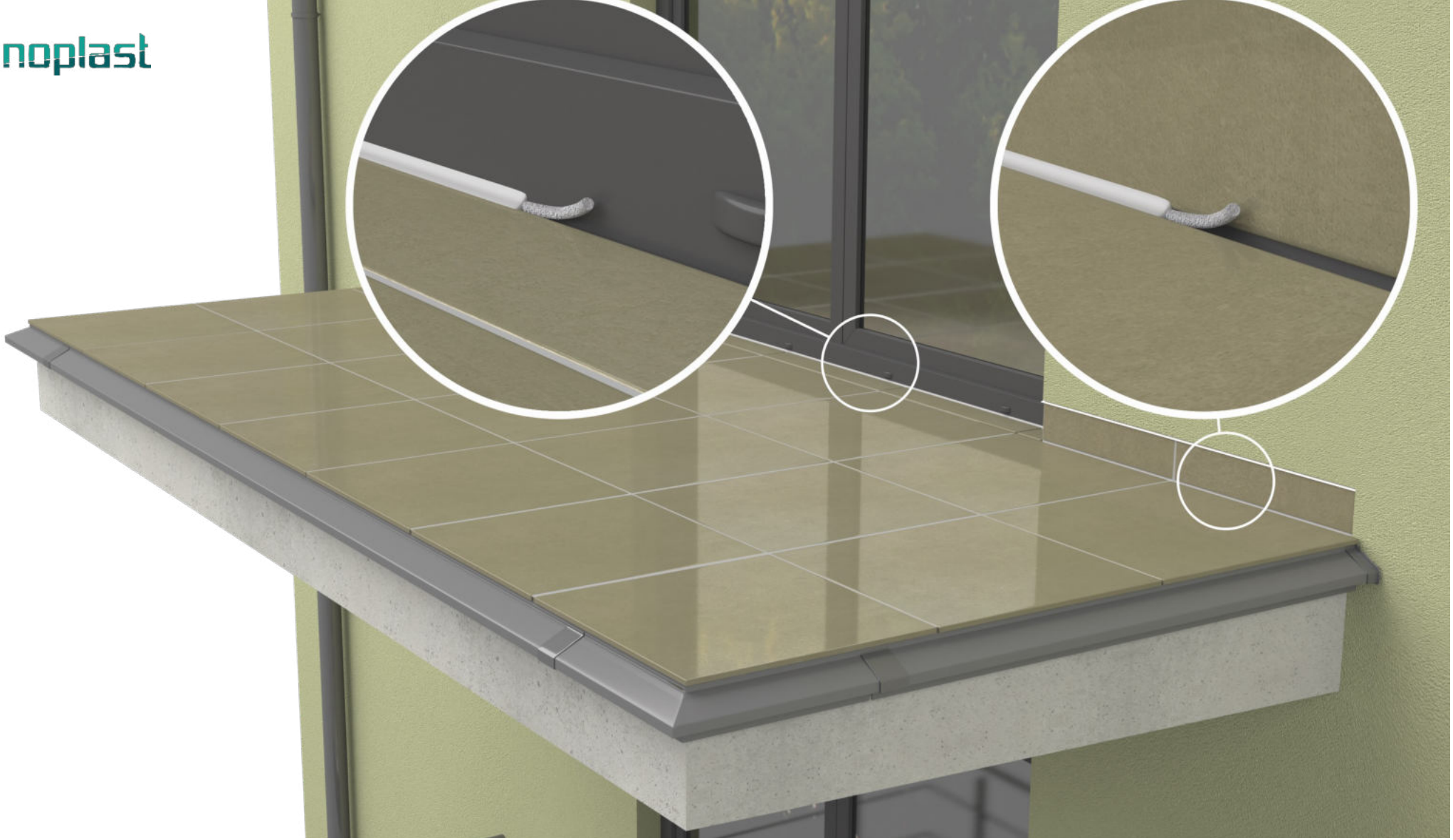
Waterproofing layer made of sealing mortar

On the cement base, we make waterproofing from the sealing mortar in accordance with the recommendations contained in the mortar manufacturer's technical data sheet.



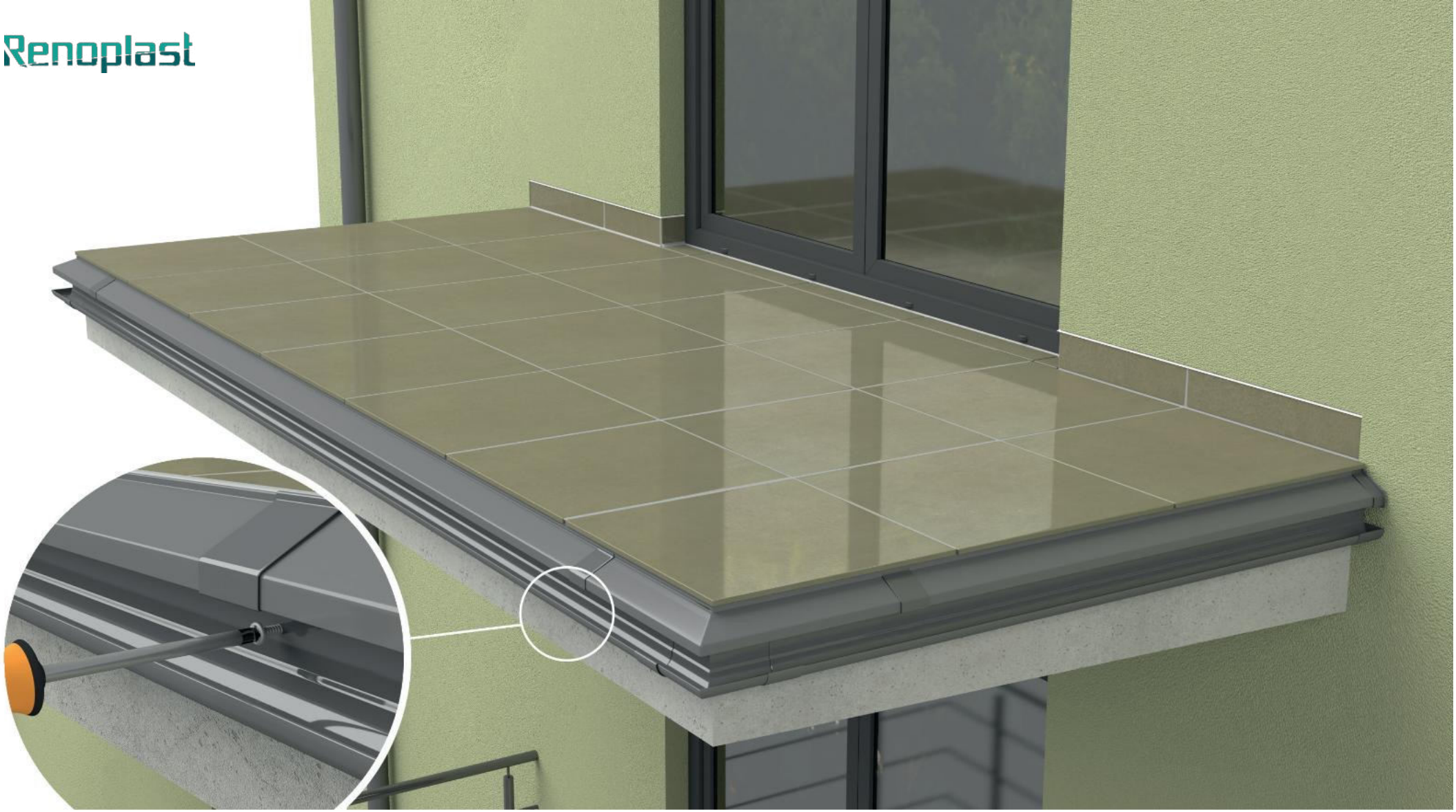
Laying floor tiles

Lay ceramic tiles on the bound sealing mortar. Ceramic tiles are laid on the adhesive mortar, suitable for outdoor applications (recommended class C2-S1 C2-S2).



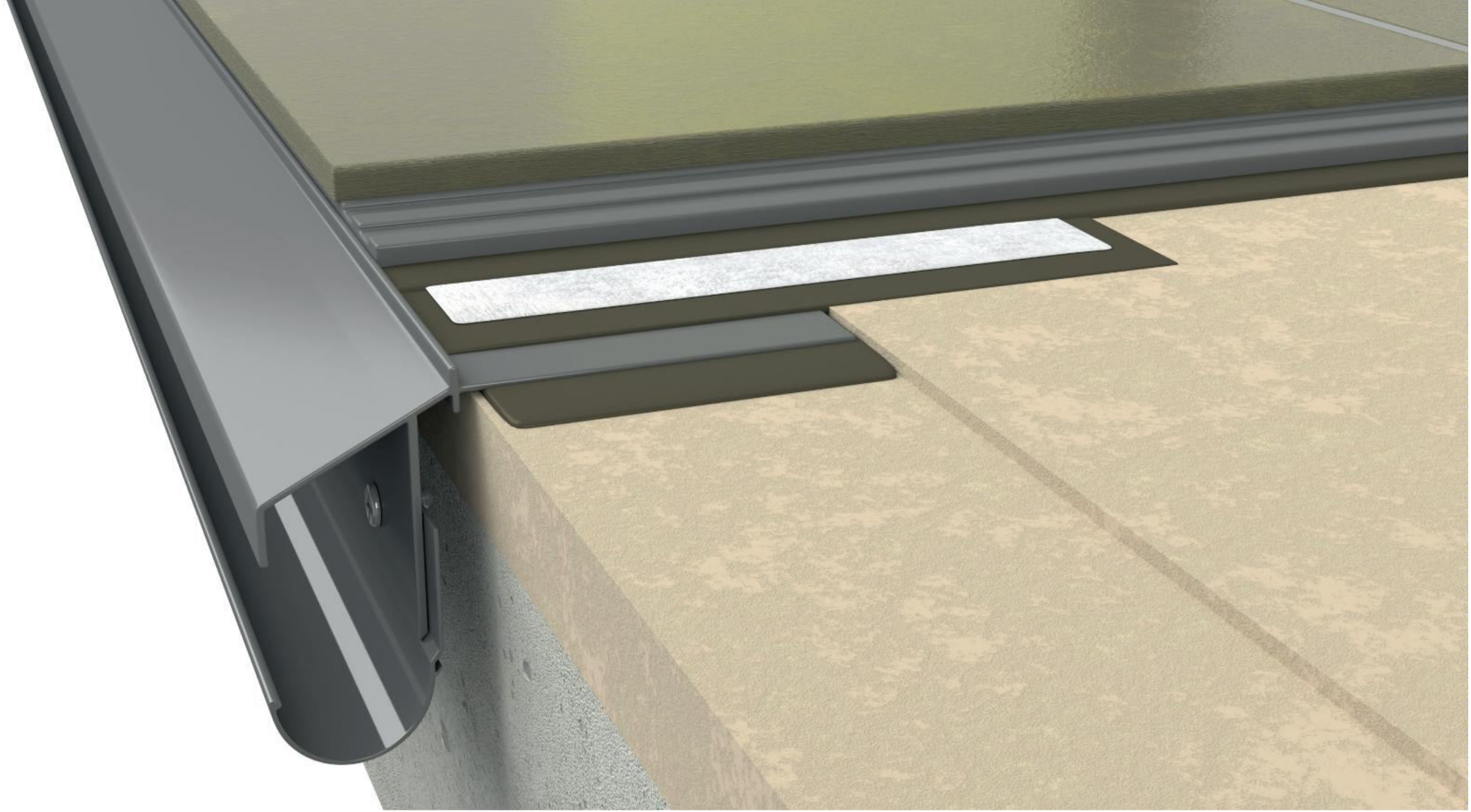
Making flexible connections to the door threshold, the plinth and along expansion joints

In the gaps between the door threshold and the floor, between the plinth and the floor and along the floor expansion joint, we lay an expansion joint cord with a diameter of ϕ6 mm. Then we fill the gap with a permanently elastic compound such as polyurethane or ms polymer. **Do not seal the space between the edge of the tile and the K100R profile.**



Installation of the R50 aluminium gutter system

The **K100R** profile enables the assembly of the **R50** aluminium gutter system. The **R50** gutter is fastened directly to the belt under the profile **K100R**, using self-drilling stainless steel screws (screws included with the gutter). We assemble at the connections **LR50** connector (see installation manual of the **R50** gutter system).



COMMENTS:

The front edge of the **K100R** profile is 3 mm high, which corresponds to the thickness of the sealing mortar (reinforced with tape). The falling edge of the **K100R** profile effectively drains water from the surface of the balcony/terrace.