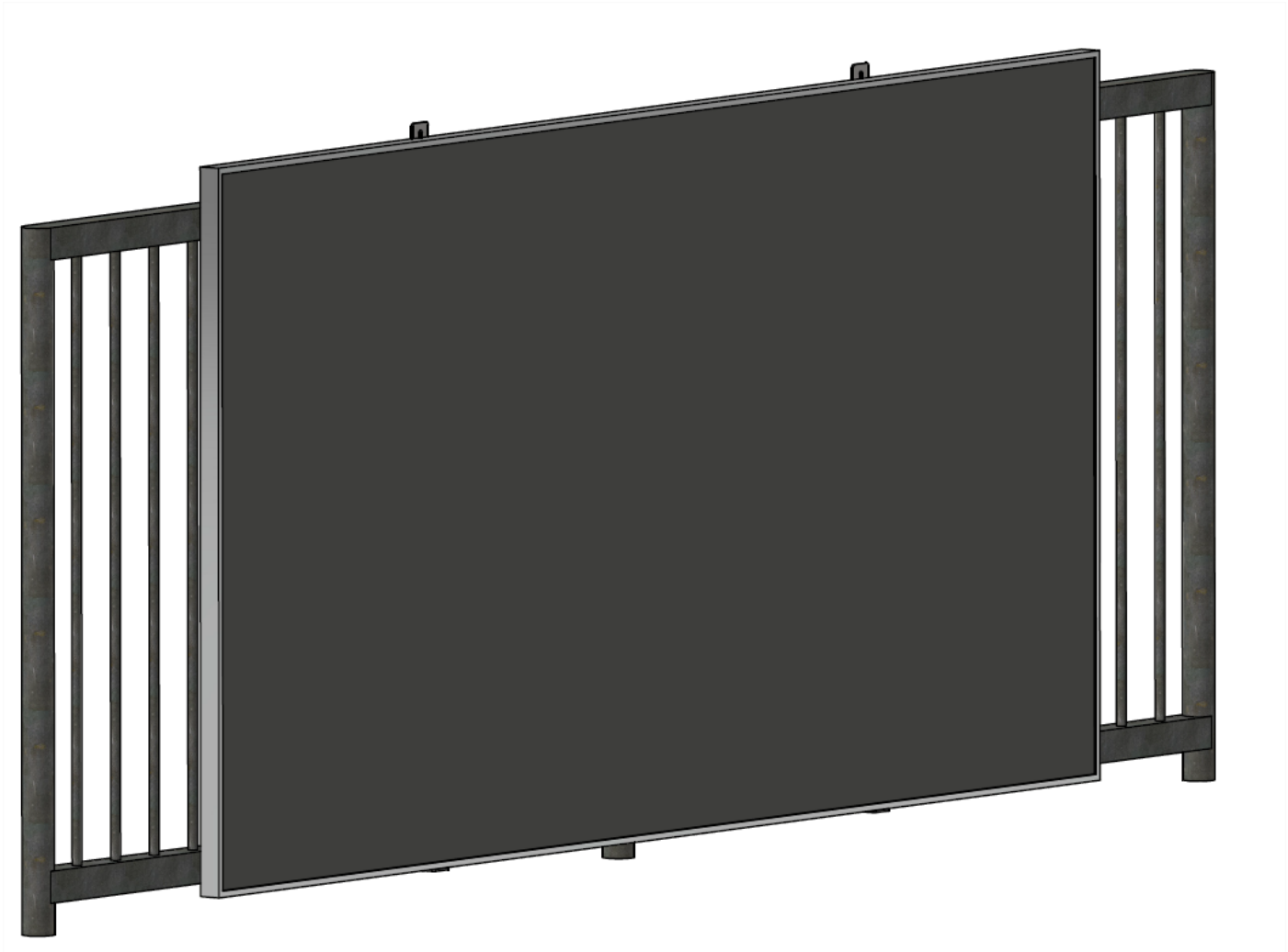
INSTALLATION INSTRUCTIONS
FOR RAILINGS
ONE MODULE HORIZONTALLY



The installation system described below is used to fix photovoltaic modules to balcony railing in horizontal orientation parallel to the railing. The design is compatible with modules from 1134 [mm] to 1140 [mm] wide and up to 2278 [mm] long.

During production, every effort was made to ensure that you receive a top-quality product that is also easy to install. These instructions are a set of rules for the correct installation of the structure components, but do not constitute a design or a substitute for it. The installer carrying out the installation must be suitably trained and qualified for the work to be carried out. Total responsibility for correct installation lies with the installer, who should choose the right type of construction.

1. As a first step, it is recommended that the elements K-74-03 and K-74-02 are covered with an EPDM pad to protect the railing from damage.

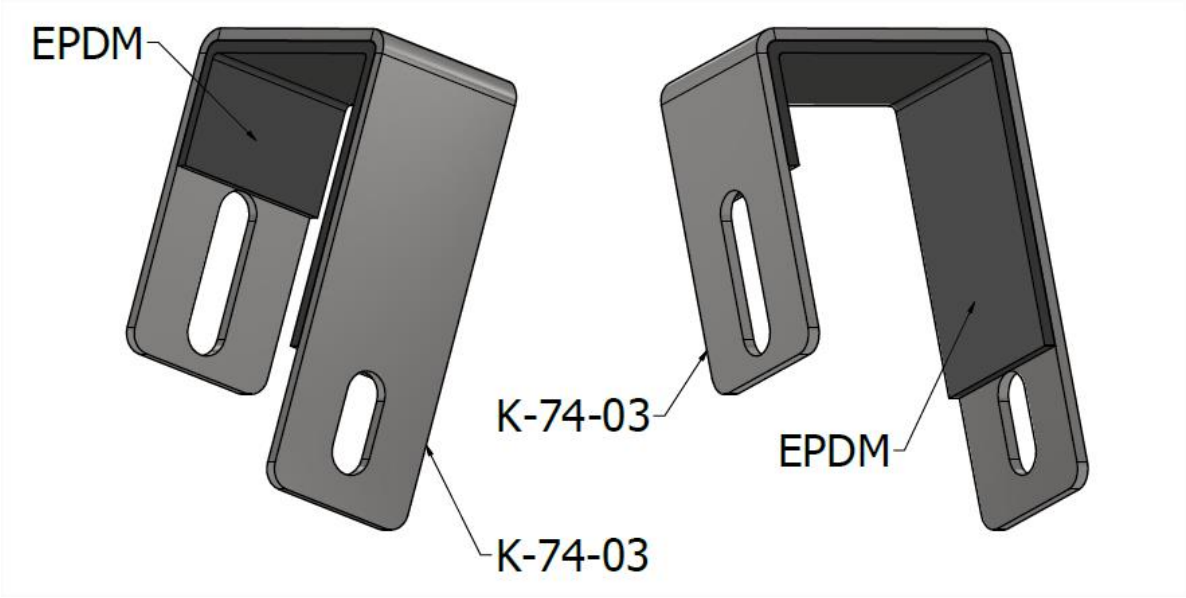


FIG.1 *Protection K-74-03*

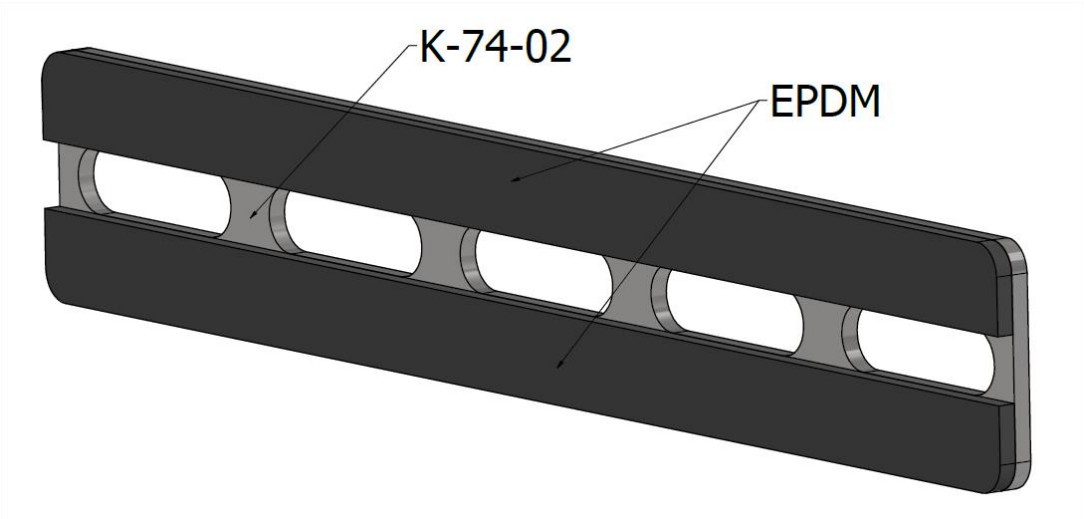


FIG.2 *Protection K-74-02*

2. The next step is to pre-screw the components K-74-01 and K-74-03 together. To do this, use one of the two prepared holes, allowing the height of the module to be selected for mounting on the railing. The components should be bolted together using a K-76-20 carriage bolt and a K-21 nut (FIG.3).

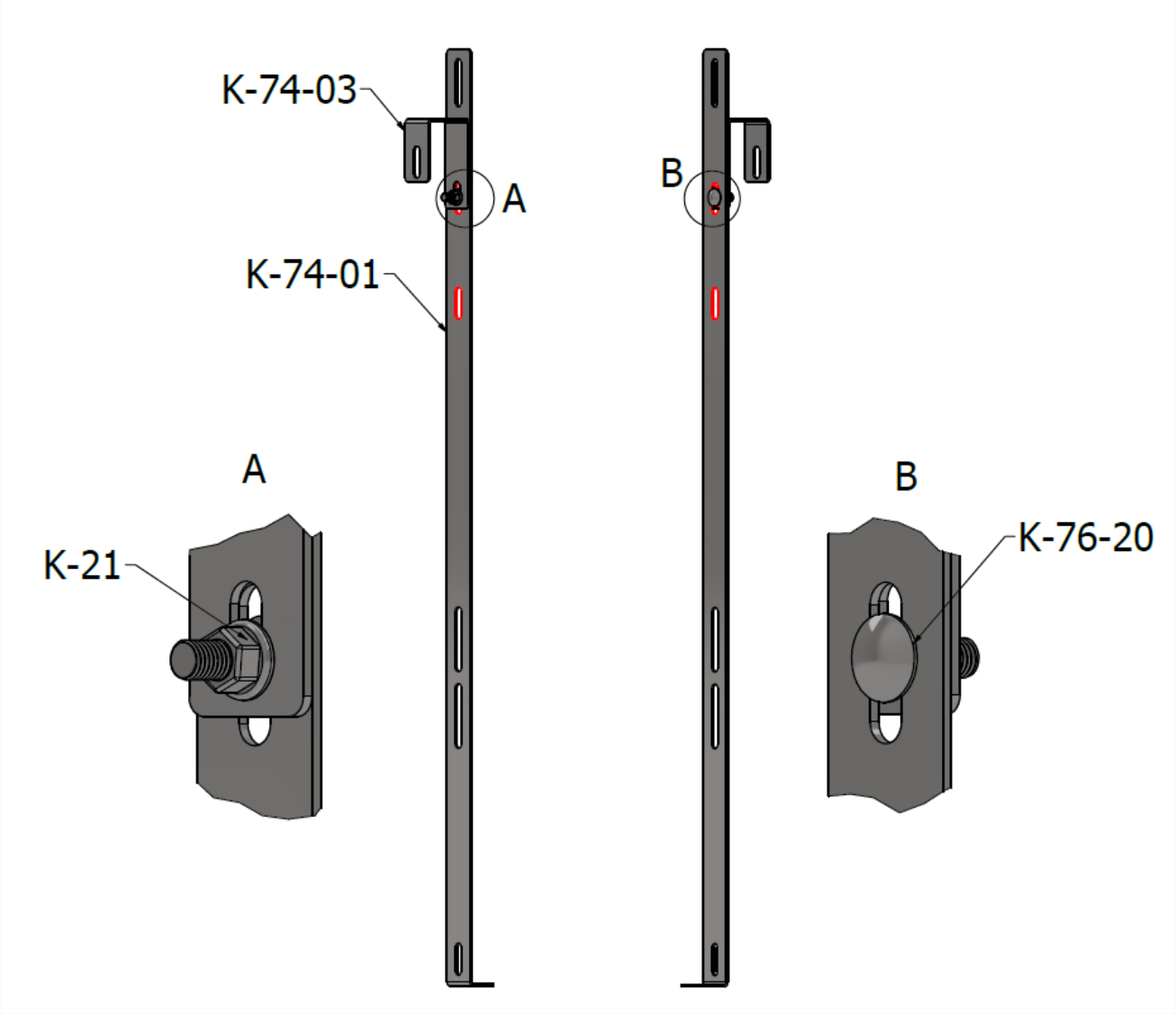


FIG.3 *Bolting of elements K-74-01 and K-74-03*

3. In the next step, the flat bar K-74-02 must be pre-bolted to the hook K-74-01 using the carriage bolt K-76-20 and nut K-21, use the appropriate hole to fit the assembly to the railing (FIG.4).

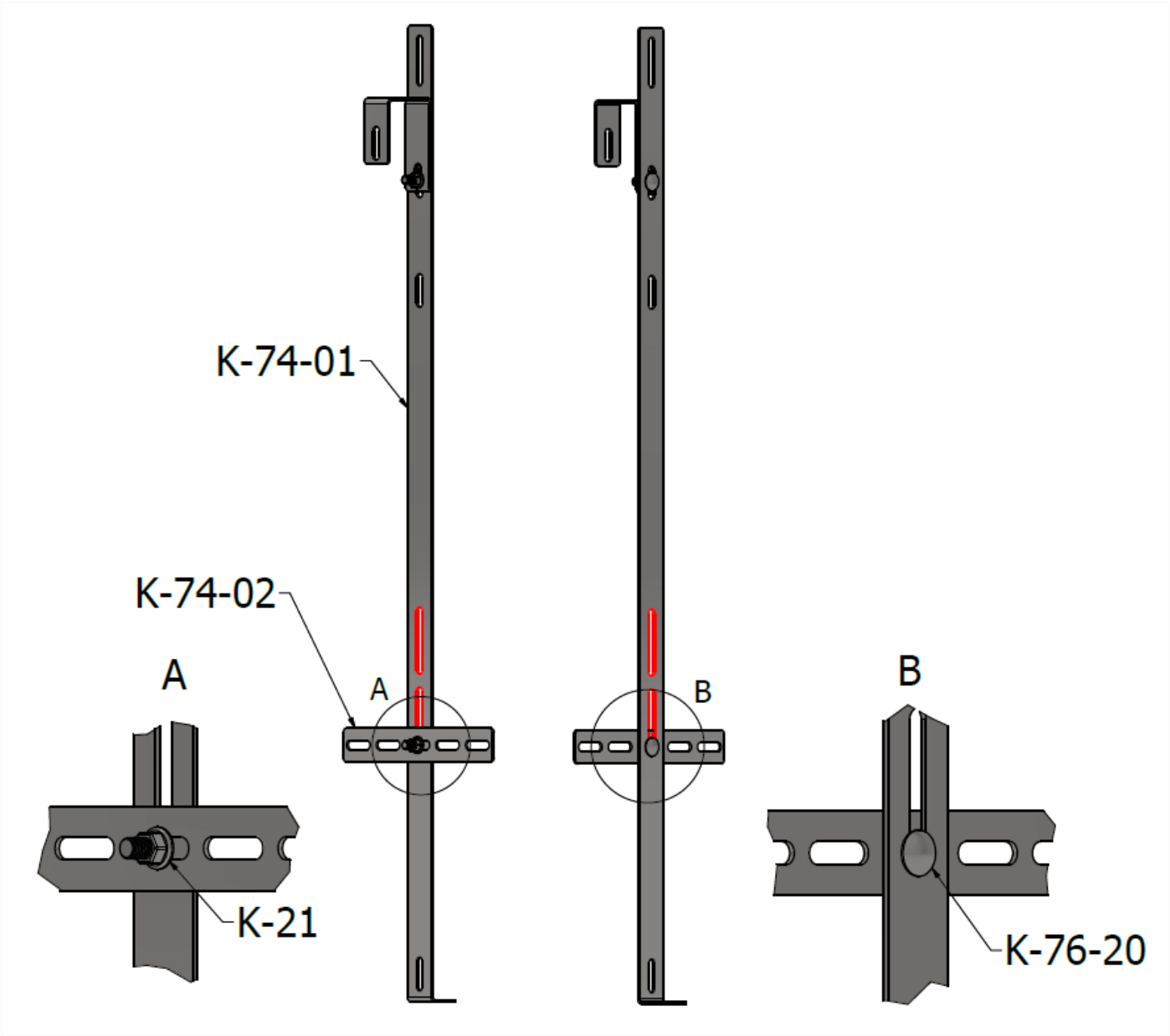


FIG.4 *Bolting of flat bar K-74-02 with hook K-71-01*

4. The next step is to bolt the module to the two pre-screwed hooks according to points 1 and 2. To do this, use four K-18-20 Allen screws, four K-51-M8 washers and four K-21-M8 nuts (FIG.5, FIG.6).

   NOTE: Use the manufacturer-prepared holes in the module frame to screw the module in place.

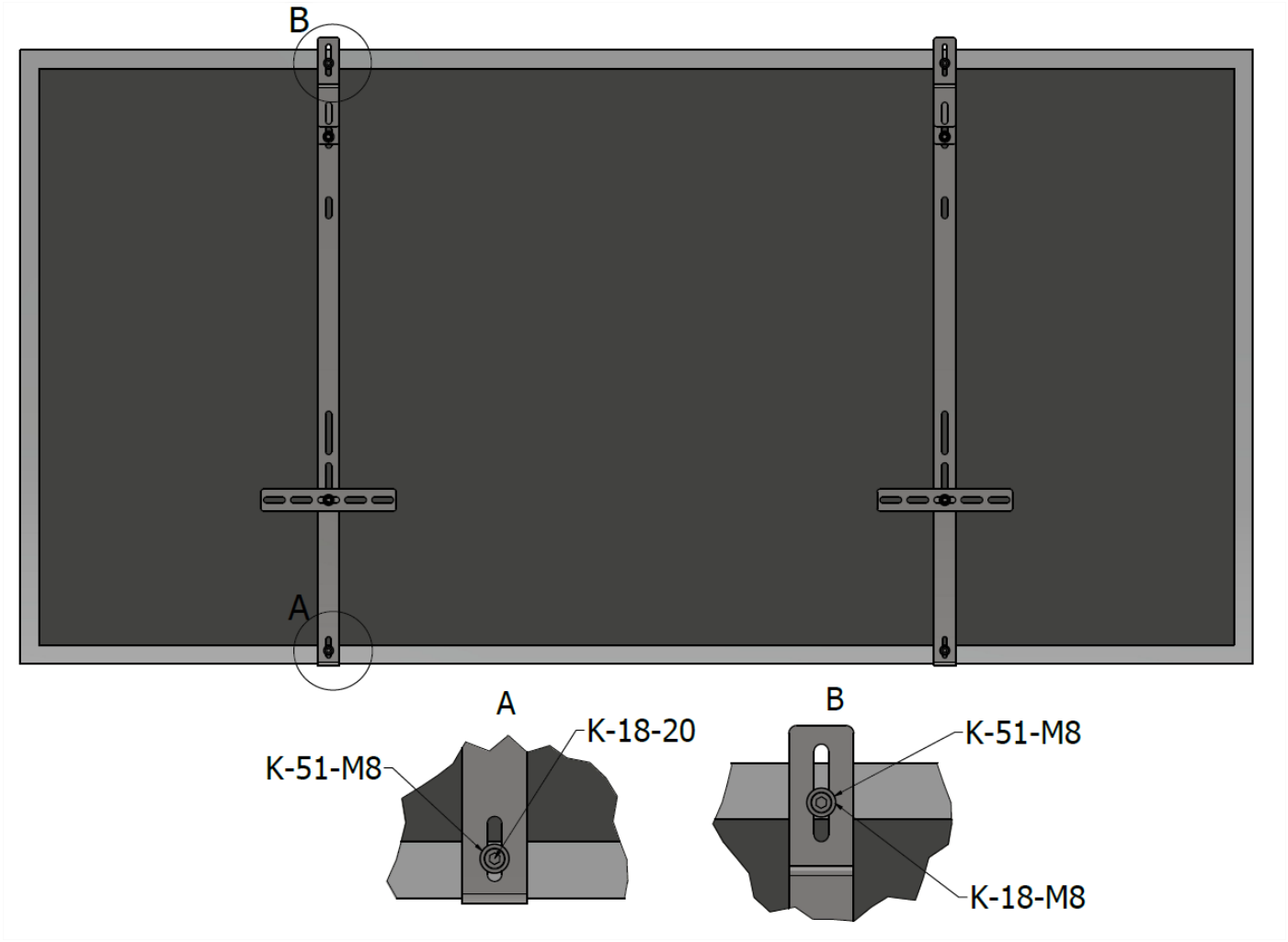


FIG.5 *Installation of module (view I)*

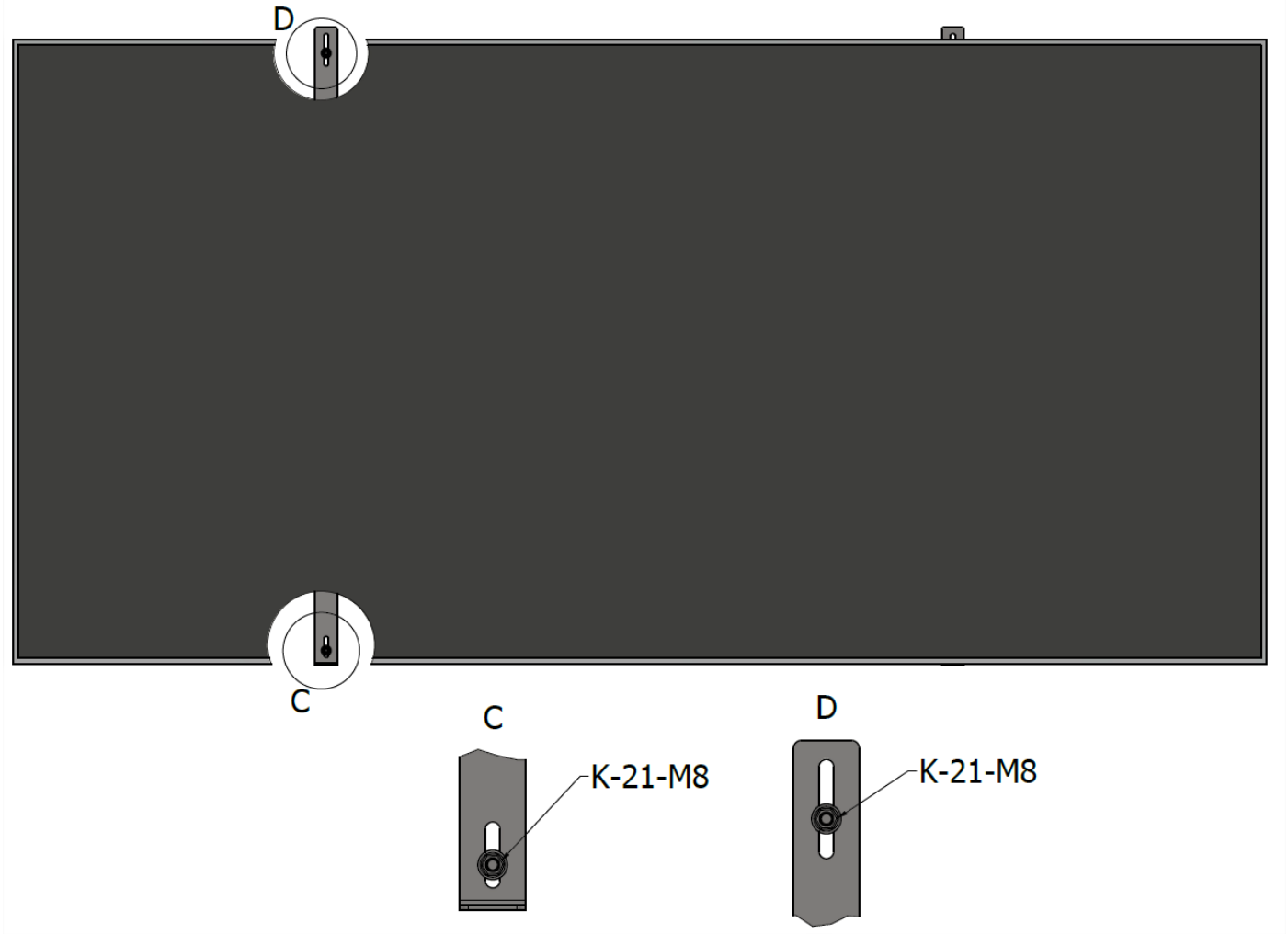


FIG.6 *Installation of module (view II)*

5. The allen bolts must be tightened to a torque of 18 [Nm].

6. In the next step, the structure should be put over the railing in such a way that the K-74-03 element leans against the railing (FIG.7).

FIG.7 *Installation of the structure on the railing*

7. In the next step, pre-screw the K-74-01 elements to the railing using the flat bars K-74-02. This is done using four K-76-100 carriage bolts and K-21 nuts.

   NOTE: It is permissible to use any two holes in the flat bar and to arrange the flat bars at an angle if the design of the railing requires this.

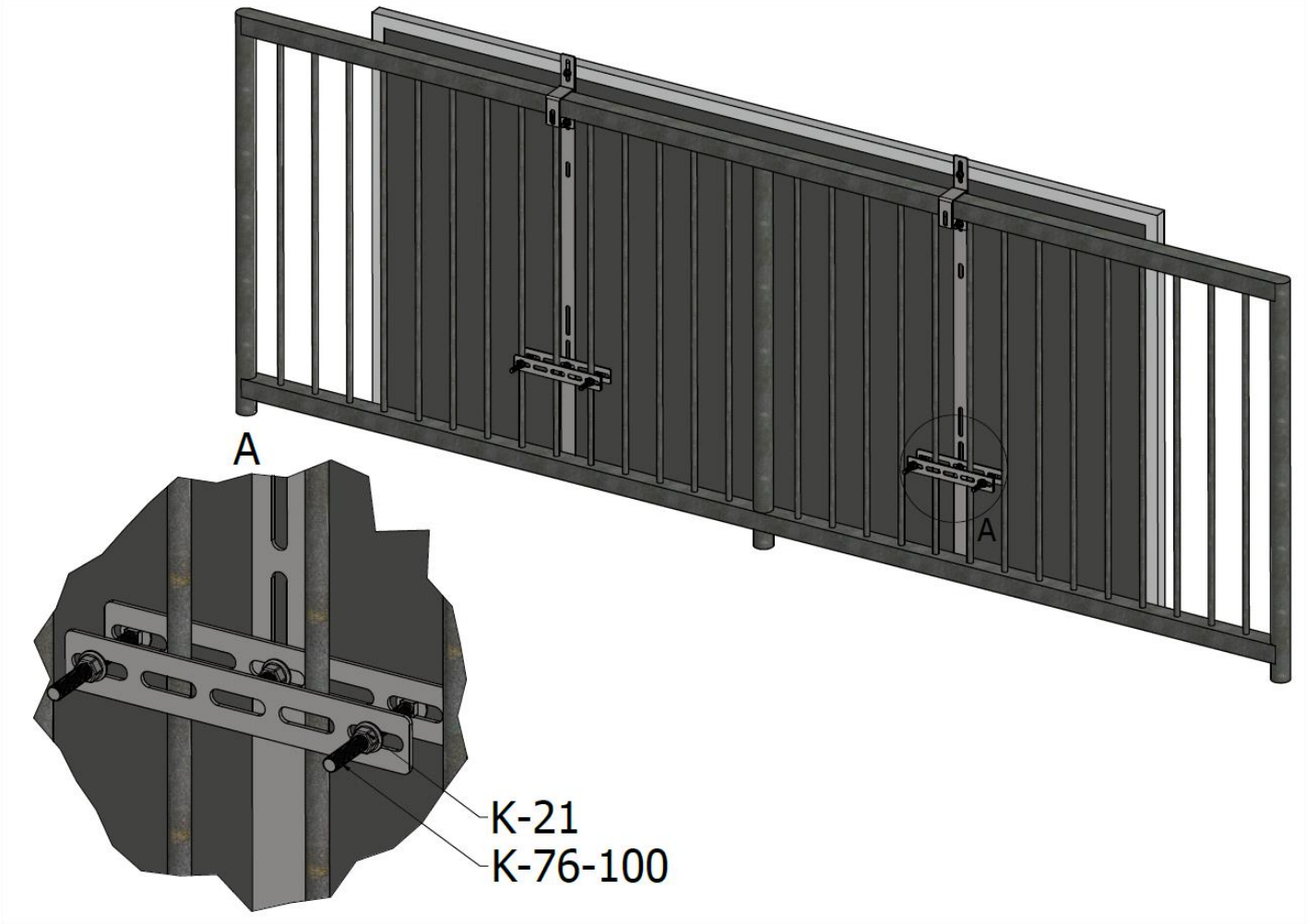


FIG.8 *Installation of flat bar K-74-02 on the other side of the railing (view I)*

8. In the next step, place the K-28-60 hexagonal bolt in the prepared hole in the K-74-03 element and screw on the opposite side with the K-21 nut (FIG.9). The purpose of this bolt is to protect the structure from falling.

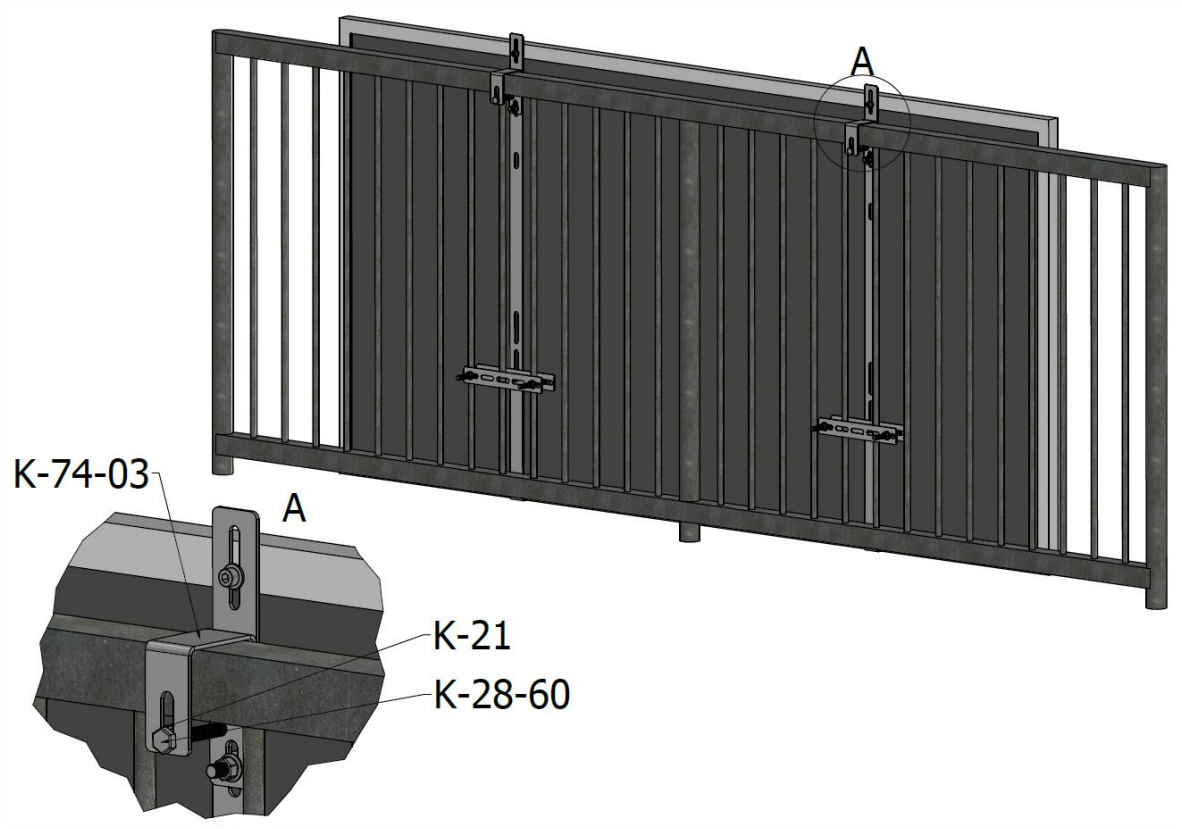


FIG.9 *Installation of the safety bolt*

9. All bolts with M10 threads must be tightened to a torque of 30 [Nm].

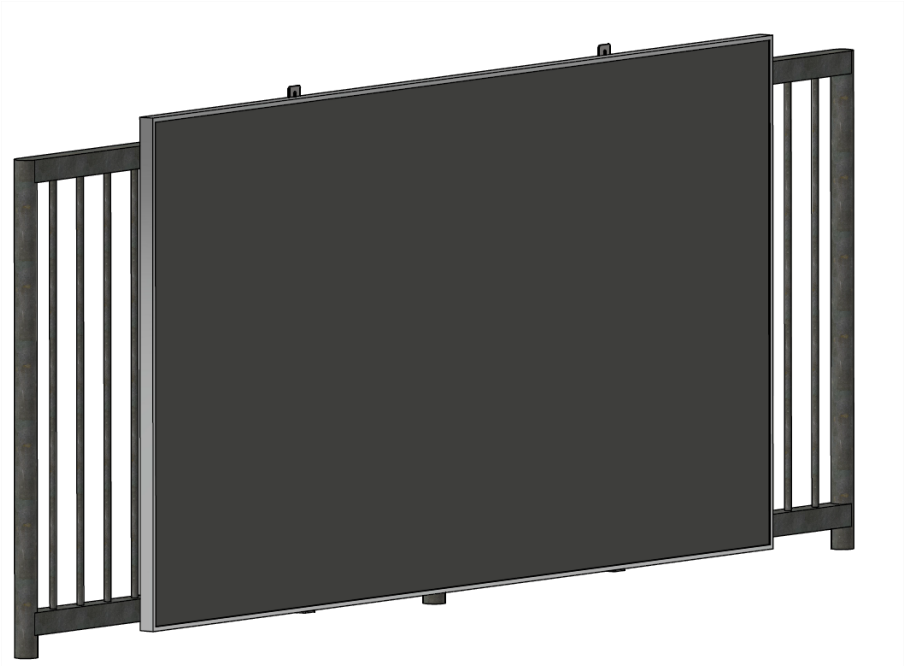


FIG.10 *Installed structure*