# Instructions for installing zipper-doors

## Materials/equipment needed

1) A door with a zipper

Standard dimensions (opening size), C-shaped zipper position on a film panel:

- a. 70 x 90 cm
- b. 100 x 180 cm
- c. 120 x 230 cm

PS! Custom sizes can be ordered.

- 2) A tape for taping the door panel on heat-shrink packaging:
  - a. DS-702 4.6 cm wide thermal conductive tape
  - b. DS-704 9.6 cm wide thermal conductive tape or DS-714 10 cm wide UV-resistant protective tape.

PS! It is recommended that UV-resistant tape be used if the recommended protective period of the packaging is longer than three months.

- Ladder
- 4) Heat tool + fire resistant gloves + fire extinguisher(s), if necessary, according to the fire work requirements.
- 5) Knife (we recommend the DS-007 cutting knife with interchangeable blades or the DS-007D film cutting knife meant for short-term use).
- 6) If desired/if necessary, the strips and screws may also be used to attach the door with a zipper to the door opening of the module. When fitting with strips, it is necessary to fix the screws with sufficient distance (the strip must be pressed evenly on to the film door) so that the film door would not slide out from under the strip during the period the packaging is used.

## **Before installation:**

- 1) Before installing the door with a zipper on the packaging, it is necessary to heat the heat-shrink packaging so that it will be under tension.
- 2) The door must then be installed on the clean surface of the packaging above the opening in the module (door opening or a side without a wall).
- 3) Check that the packaging is not dusty or damp in the area where the door is installed to ensure maximum efficiency of the tape.
- 4) The packaging must not be cut before the door is installed (to allow the tape to be pressed against the film with sufficient pressure when the door is installed).

## **Installation:**

(as a reference, see video with instructions on YouTube – <u>link</u> {https://youtu.be/Bp39jYce430})

The door with a zipper must be placed at a sufficient height to allow at least 10 cm of space around the film panel of the door so that the door can be attached with tape.

- 1) Hang the film door to the selected location with pieces of tape so that the edges of the film door are straight (no folds under the tape). There is no need to tighten the film door excessively.
- 2) The door must be taped to the film with double tape (the narrower tape first and the wider tape on top, which is at least double as the width of the bottom tape), covering the entire outer edge of the door with a zipper so that half the width of the tape covers the film door and the other half covers the film packaging under the door. Tapes must be rubbed firmly against the film so that they achieve maximum bond and do not let in wind, causing detaching. We recommend using a plastic/rubber spatula for rubbing.
- 3) If taping is done in cold/dusty/wet conditions, be sure to clean/dry the film surface carefully and warm both tapes after each tape is placed to ensure that the tape adhesive is activated.\* Avoid heating the door (if necessary, use gloves).

- 4) The film under the zipper should not be cut until the last moment, when it is known that it is necessary to access the packaging. The film must be cut from under the film door no earlier than 45 minutes after heating the entire package.
- 5) The cut in the film must be the smallest necessary to carry out the work under the film packaging. The cut must be carried out in such a way that it is smaller than the zipper opening. In the worst-case scenario, the water penetrating through the zipper cannot damage the module and must remain between the film packaging and film door. We recommend that you make a small hole with a screw/nail in the bottom edge of the film door to let out any water. When making the door be careful not to damage the film of the packaging under the film door.
- 6) After the door has been installed, it is not permitted to heat the film door and it is not recommended to reheat the packaging in order to avoid additional pressure on the zippers of the door. It is difficult or impossible to close a zipper of a film door that has been reheated after opening. Additionally, after heating, the zipper gap may increase and result in water damage to the module.
  - \* For the best taping results the temperature of the materials (tape, film door and film packaging) should be over 18°C (65°F).

# Activities prior to transport/module storage:

- 1) If transport is started or the product is stored outside, we recommend that you tape the zippers so that rain does not pass through the zippers or that wind or branches and the like do not break the door next to the zipper during transport. To gain access again, the tape must be cut from above the zipper and replaced with a new one later.
- 2) During prolonged storage, the fastening tapes must be checked before transportation and at least every three months to ensure that the sun has not reduced the properties of the adhesive. For packaging stored for a longer period, we recommend using UV-resistant tape as the wider tape. If necessary, replace the tape.

TACK

