# **BIJLARD Houtlijm Tifa MSD4 Processing instructions**

### Application

Houtlijm Tifa MSD4 has been tested and certified for the interconnection of posts and sills in wooden frames (type C) with certificate number 00000.

### Wood

Accoya Meranti Red Grandis Sapele

### Voorbereiding

Preparation

Make sure the surface is clean, dry, dust-free, grease-free and the right materials. For optimal bonding, the temperature of the environment and the material is between  $+15^{\circ}$ C and  $+30^{\circ}$ C, and the relative ambient humidity is between 50% and 90%. The wood moisture content should be between 10% - 18% (for Accoya approx. 4%-6%), there should be no difference in the wood moisture content between the core and the outside of the wood. The tolerance of the fit of the frame joint should not exceed 0.3 mm. The frame connection is used as a double dowel connection.

### Dowels

#### <u>Sizing</u>

Houtlijm Tifa MSD4 is also used for bonding the dowels, the manufactured wooden dowels comply with BRL 2908.

At least 2 dowels of  $\geq \emptyset$  14 mm should be used.

- Minimum coverage: 8 mm
- Maximum coverage: 38 mm

The distance between the dowels is:

- Be at least equal to the diameter of the dowel;
- Smaller than 4 x the diameter of the dowel.

Length of the dowel

The minimum length of the dowels is 80 mm.

The centre line of the dowel should be inserted into the wood over the following lengths:

- In the part parallel to the wood fibre: at least 35 mm;
- In the part perpendicular to the wood fibre: at least 24 mm;

Exception: In the case of the connection between an intermediate post and an intermediate threshold, the length perpendicular to the wood fibre must be at least 20 mm.



In the case of crossings, if the thickness of the continuous posts or thresholds is less than 85 mm, long dowels shall be used which are not interrupted at the location of the intermediate post or threshold.

#### Depth of a dowel hole

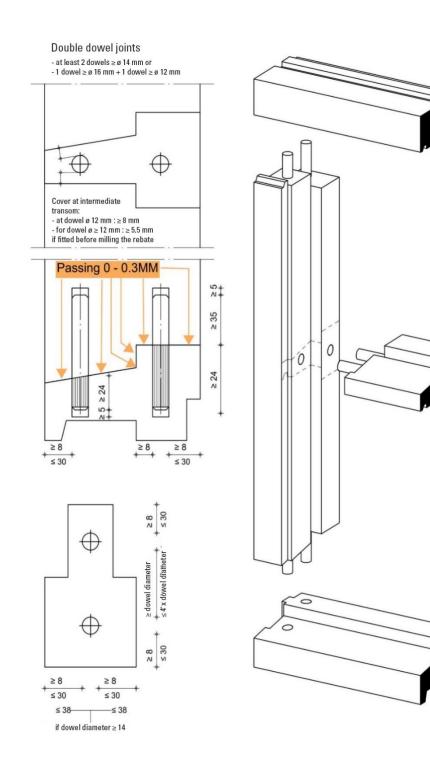
The depth of a dowel mat should be at least 5 mm more than the length of the dowel to be used. Piercing the dowel holes is not permitted.

Relationship between dowel diameter and dowel hole diameter

The diameter of the dowel hole depends on:

- Maximum tolerance of +/- 0.1 mm;
- •Wood:
  - In the case of hardwood, the nominal diameter of the dowel hole should correspond to the nominal diameter of the dowel;
  - In the case of softwood, the nominal diameter of the dowel hole must be 0.2 mm smaller than the nominal diameter of the dowels;
  - For modified wood, please refer to SKH publication 13-02.







#### Processing

Step 1:

Houtlijm Tifa MSD4 apply from the tube, sausage or bucket (mechanically) in grooves with a thickness of 3-5 mm. Keep approx. 5 mm from the edge free of glue (see photo 1). At the dowel holes, apply the glue all around on the inside of the edge of the dowel hole. The dowel moves the glue further in. The extra-deep grooves ensure that excess glue does not get trapped between dowel and profile. Apply an extra adhesive bead to the raised side (heel) before applying the dowels. The adhesive distributes further during confinement.

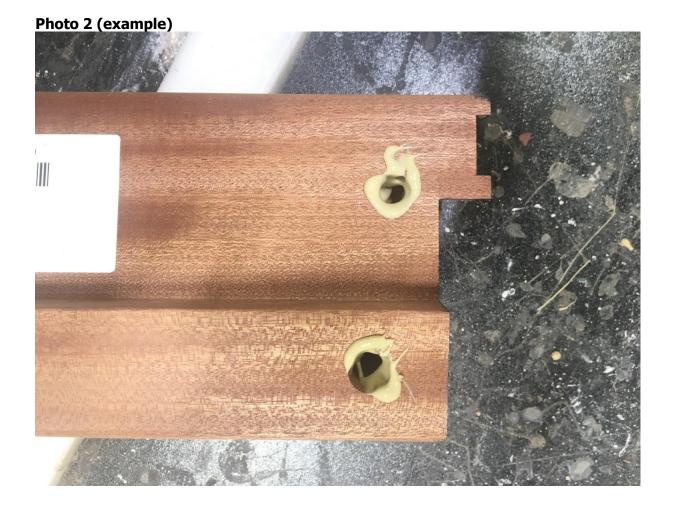
Photo 1 (example)





Step 2:

For the dowel connections, apply TIFA SEALER BRL 0819 around the inside of the dowel holes (see photo 2).





Step 3:

It is important to ensure that sufficient glue has been applied. After locking the joints, a small amount of glue should be squeezed out to create a 100% filling bond. (see photo 3)

Photo 3 (example)





### Confinement, pressing time and setting time

Locking should be done within 15 minutes after the adhesive has been applied. Higher temperatures and/or higher humidity will result in a shorter open time. The discharge pressure should never exceed 20 bar.

If sufficient adhesive has been applied and no glue comes out of the joint during the application of the pressing pressure, the pressure may be increased minimally until the adhesive is squeezed out of the joints. To ensure that the adhesive is distributed correctly, a pressing time of at least 5 seconds must be adhered to. In order to build up sufficient strength, the joints may remain closed after bonding and should not be loaded for at least 6 hours.

#### Paintability

Houtlijm Tifa MSD4 is easy to paint, depending on the paint system, the glue must be provided with a first water-based paint layer/sealer within 4 hours. In consultation with your paint manufacturer, longer periods of up to 72 hours are possible.

#### Shelf life

Houtlijm Tifa MSD4 may be processed up to 12 months after production, provided that it is stored in tightly closed packaging in a cool place. Store in a frost-free place. Always process in order of receipt (FIFO).

Our processing recommendations are based on extensive research. Due to the wide variety of materials and conditions under which gluing is used, we cannot accept any liability for the results obtained and/or any damage that would result from the use of the product. We are here for you with advice.

6-2-2024

