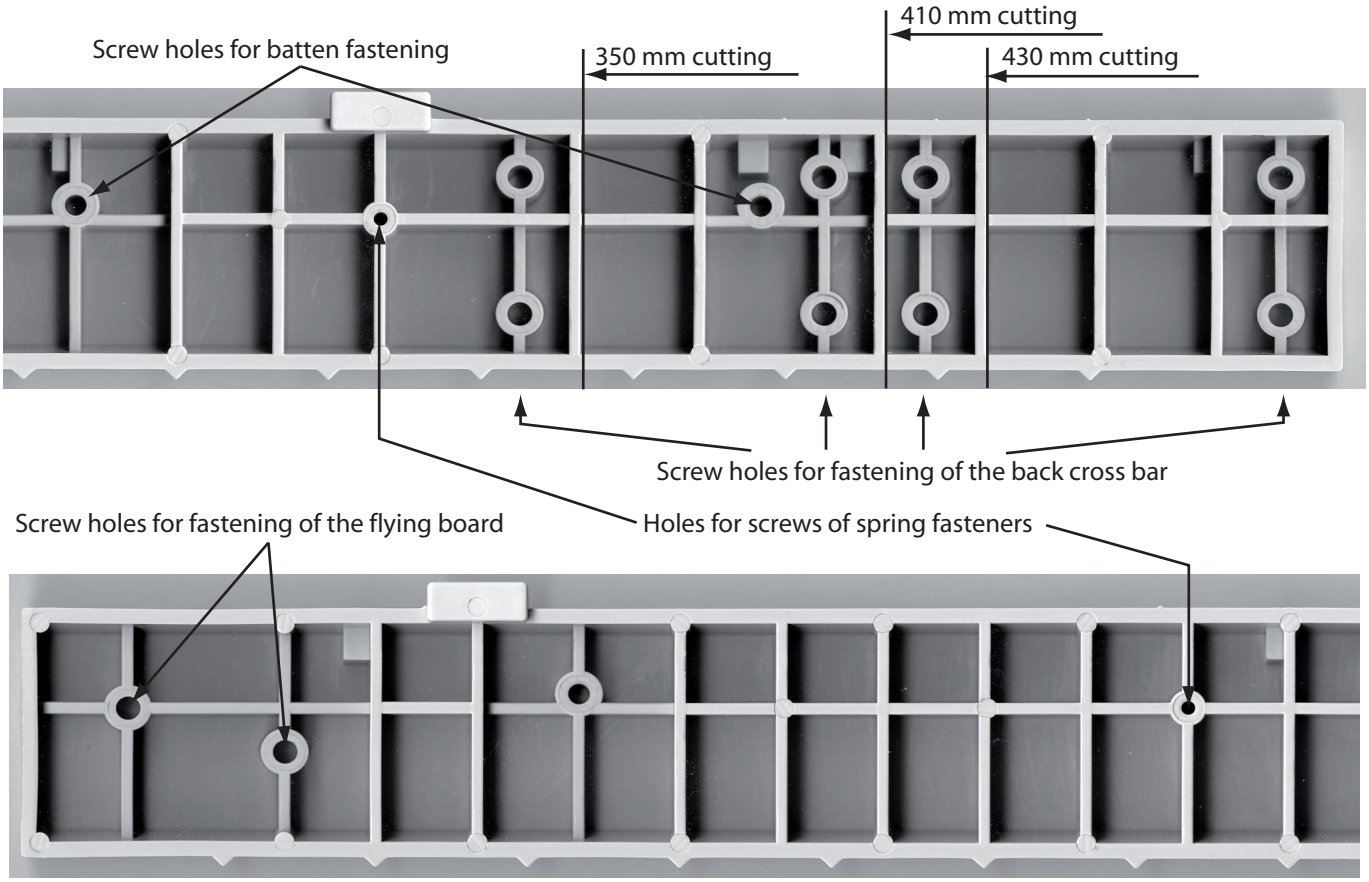
POLYETHYLEN HAPPYKEEPER BOTTOM BOARDS - ASSEMBLY INSTRUCTIONS



BACK PART (top) AND FRONT PART (bottom) OF THE SIDE BAR

1 - CUTTING OF THE SIDE BARS

The four sides of the new frame are independently molded and they may have to be cut, according to the size of the hive.

1A - BACK CROSSBAR AND FLIGHT BOARD

Cutting of the back crossbar and the flight board has to be made according to the number of frames, which are 37.5 mm apart.

The respective rounded lengthes are the following ones:

5 frames : 190 mm; 6 frames : 230 mm; 7 frames : 265 mm; 8 frames : 302 mm (The nominal length is 300 mm but it's better to let 1 mm more on each side of the struts to avoid a too narrow side gap); 9 frames : 340 mm; 10 frames : 380 mm; 11 frames : 415 mm; 12 frames : 450 mm (no cutting).

These values can be slightly adjusted for any reason. Between 5 and 9 frames, struts must also be cut. In all cases, they have to enter without play, possibly a little tightened, into the frame.

VERY IMPORTANT : Cutting of the flight board has to be necessarily made on the opposite site of the marking „HAPPYKEEPER". Cutting of the crossbar has to be made on the side with the vertical lines which are also marks. Otherwise, they become unusable.

1B - SIDE BARS

Four hive lengthes can be achieved : 500 mm (no cutting), 430 mm, 410 mm and 350 mm. Cutting has to be necessarily made flush with the back side of the wall at the back of the screw holes. This wall will then be in the continuation of the back face of the back crossbar.

2 - ASSEMBLY

Eight stainless steel screws having a diameter of 4.8 mm are used for the assembly. The flight board and the back crossbar must be placed on the positioning knobs situated on the side bars. Screwing can then be done. There's no mistake about it. It is just better to locate the vertical lines on the internal side for esthetic reasons. Otherwise, there is no consequence and it is always possible to change.

3 - INSTALLING TUBES AND STRUTS

The length of the tubes must be controlled and eventually adjusted before mounting into the struts. They must be loose inside the frame. In the case of 10 frames boards, struts are not cut and the flanges fit into the corresponding slots. In the case struts have to be cut, they fit into u-shaped housing situated at the bottom of side bars.

4 - CASE OF HIVES WHOSE INTERNAL WIDTH IS GREATER THAN 380 mm

It is in particular the case of Dadant 12f hives. It is then necessary to fasten on each side a wooden batten on which will come the flanges of the struts. These battens will be 18 mm in thickness on all the internal length of the frame at the same level as the flight board. Three holes for screws having a diameter of 4 mm are used to fasten the battens. The struts must be mounted without play or slightly tightened inside the frame.

5 - TOOLS

An electric saw (a miter saw for instance) allowing to cut off squarely in a perfect way is necessary. Besides, an electric screwing machine will make screwing easier.