

Getting the correct spacing of the frames in the hive will avoid the problem of the bees building brace comb, because the spacing provided was too great. A spacing of 35 mm to 38 mm between the centres of each frame which is achieved by 12 or 11 frames equally spaced in the National hive,

In the brood chamber this spacing provides the maximum space for brood and is therefore maintained. The Hoffman self spacing frame provides an effective, robust and easy to manage spacing method.

In the super however it is more efficient to reduce the number of frames as the bees draw out the cells on the foundation. Getting the same yield of honey from 8 frames instead of 12 means one third less frames to uncap. It is normal practice to use a spacing of 11 frames in the super when new foundation has been used and, once the bees have drawn the comb to reduce the number of frames. The bees will continue to draw out the cells they have already constructed to fill out the additional space giving deeper cells for the honey.

The table below shows different spacing methods and the spacing they achieve.

National internal measurement: 420 mm used for calculations.			
Method	Maximum frames that can be fitted using method	Centres (Note 1)	Notes
Wide ends	8	53 mm	Only use for drawn foundation in super
Castellated (9)	9	47 mm	Only use for drawn foundation in super
Castellated (10)	10	42 mm	Only use for drawn foundation in super
Manley (Note 2)	10	42 mm	Not recommended - included for completeness
Castellated (11)	11	38 mm	Use for new foundation
Narrow ends	11	38 mm	Use for new foundation with SN1 frames in super
Hoffman (Note 3)	12	35 mm	Use for brood chamber (DN4 or DN5 frames).

Notes:

- This is the spacing between the centre of each frame. New foundation should be spaced at 35mm to 38 mm. If wider spacing is used the bees will build brace comb rather than neatly build out from the foundation.*
- The Manley frame has straight parallel sides over the full depth of the frame. It was designed to reduce frame movement when transporting the super. It is prone to propolis by the bees who stick the frames together where they meet.*
- Eleven Hoffman frames plus a dummy frame in brood chamber are recommended. This ensures consistent frame spacing, near optimum brood area with the dummy frame giving readily available free space to assist manipulation when inspecting the brood.*