

LADDERMATE

Simply the height of safety USER GUIDE

General Ladder Safety

The H.S.E. strongly recommend that, in particular, your ladder is set at an angle of approximately 1 metre out for every 4 metres up and is on a firm, level base. The design and structure of Laddermate ensures this.

Benefits of Laddermate

1. Laddermate will prevent outward ladder slip when used in accordance with manufacturers' instructions and in conjunction with guidelines provided by the H.S.E. It is deemed to be "equal to or better than footing the ladder" according to the H.S.E devised test but they do not recommend footing a ladder over 5 metres.
2. A lot of the "bounce" is taken out of a ladder by Laddermate, making it feel more secure and having the feel of a fixed ladder.
3. Laddermate provides an extra 2 points in contact with the ground, forming a 2-dimensional base in the shape of a trapezium (see Fig. 4) This provides enhanced sideways stability compared to the 1-dimensional base of a ladder on its own (see Fig.3).
4. The proper use of Laddermate ensures that the ladder is set at or about the correct angle.
5. Laddermate can be installed in approximately 5 seconds.

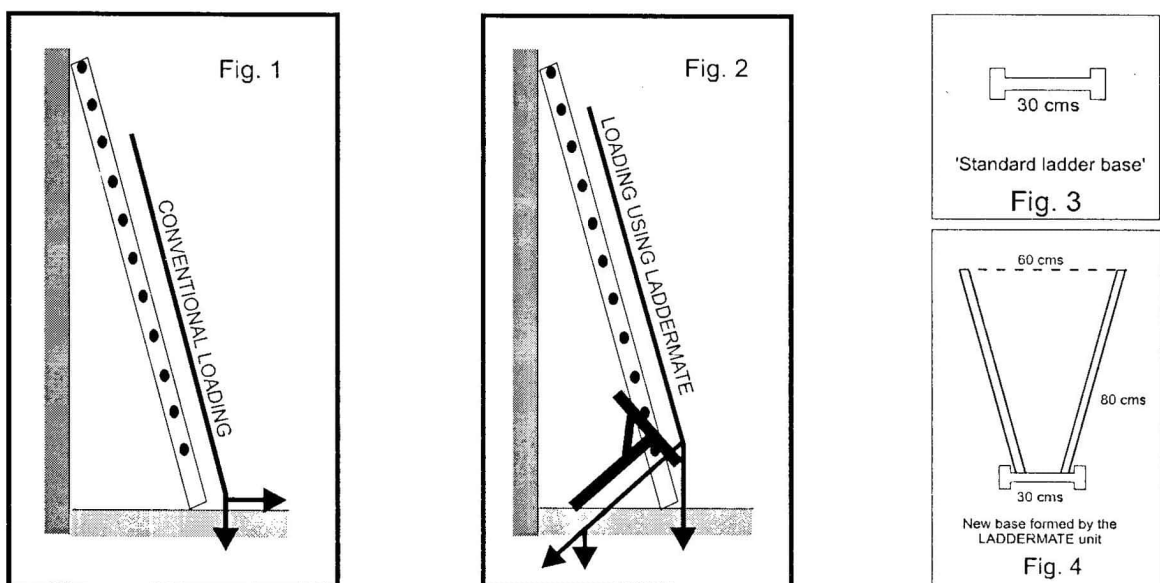
DO NOT

- ◆ Use Laddermate between 2nd & 3rd rungs on **LEVEL** ground - this will create an unsafe working angle.
- ◆ Adjust ladder in any way whilst Laddermate is fitted - always fit it **LAST**, after setting up and remove **FIRST** before moving or lowering your ladder.
- ◆ Engage in unsafe practises - Laddermate is a safety aid and is not intended to allow users to over-ride safety recommendations.

Principles of Laddermate

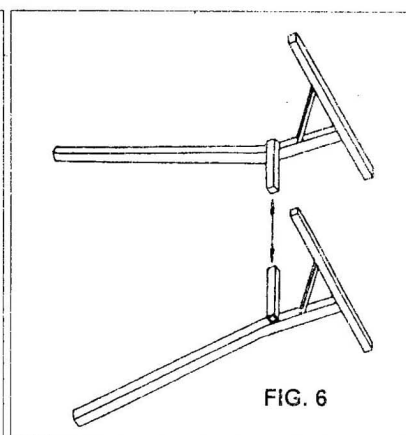
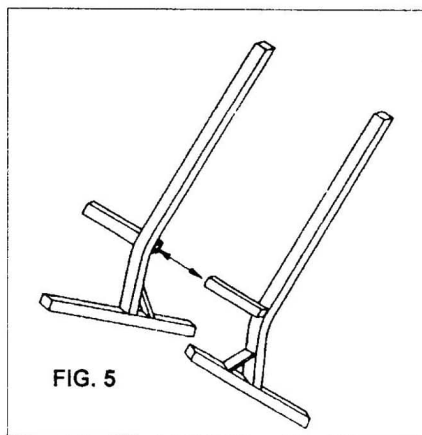
A ladder leaning against a wall forms a triangle which is known to be a strong shape for a structure. Using Laddermate creates a triangle within a triangle making it even stronger. By harnessing the principles of applied mathematics, Laddermate diverts the part of the usual downward force of the user through it's geometric angles and back towards the wall, see Fig. 2 compared to Fig. 1. The result of this is that the ladder, when used as directed, cannot slip outwards from the wall or upright.

EFFECT OF LOAD DISTRIBUTION USING LADDERMATE



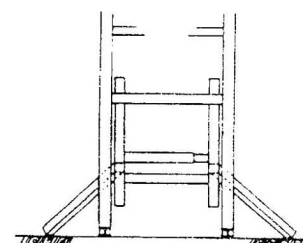
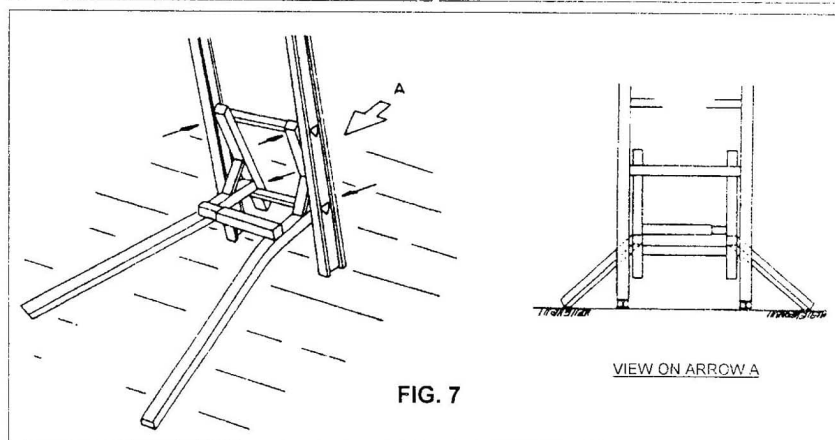
Use of Laddermate

1. With a little practice it takes 5 seconds to assemble and install.
2. From the stowed/packed position (Fig.5) slide the 2 sections apart, reverse one of them and insert one side of the cross member into the other. (Fig.6)



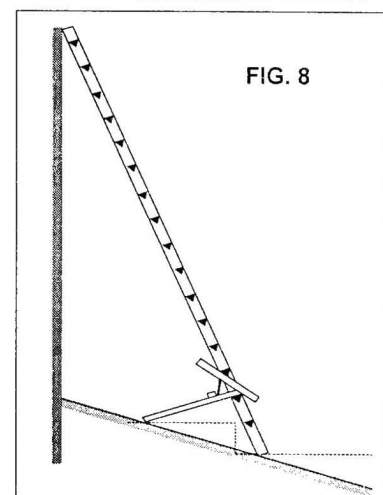
Level ground

3. Ensure that the label showing **TOP** is uppermost and the ladder is set against the wall/upright correctly. Laddermate is installed from the rear (wallside) of the ladder between the **FIRST** and **SECOND** RUNGS. Simply place the lower legs of the "H" shape over the bottom rung & extend the cross-member outwards as far as the width of the ladder will allow (Fig.7). It is essential to check that there are 4 points of contact between Laddermate and the rungs as indicated by the small arrows in Fig.7. The "H" should be touching the inside of the stiles if possible and the long, splayed section resting on the ground. If any of these parameters are not met remove Laddermate, adjust the ladder angle and re-fit.



Ground sloping away from the wall

4. If the ground slopes away from the wall or there is a raised area at the back of the ladder such as a kerb, Laddermate can be installed between the second and third rungs provided the ladder is still at the recommended angle (Fig. 8)



Ground sloping sideways

5. In these circumstances, level the ladder in a safe manner and then instead of extending the cross-member to the full width of the stiles stop short by a few inches and twist the Laddermate to accommodate the slope (Fig.9). Make sure that there are still the 4 points in contact with the 1st and 2nd rungs.

