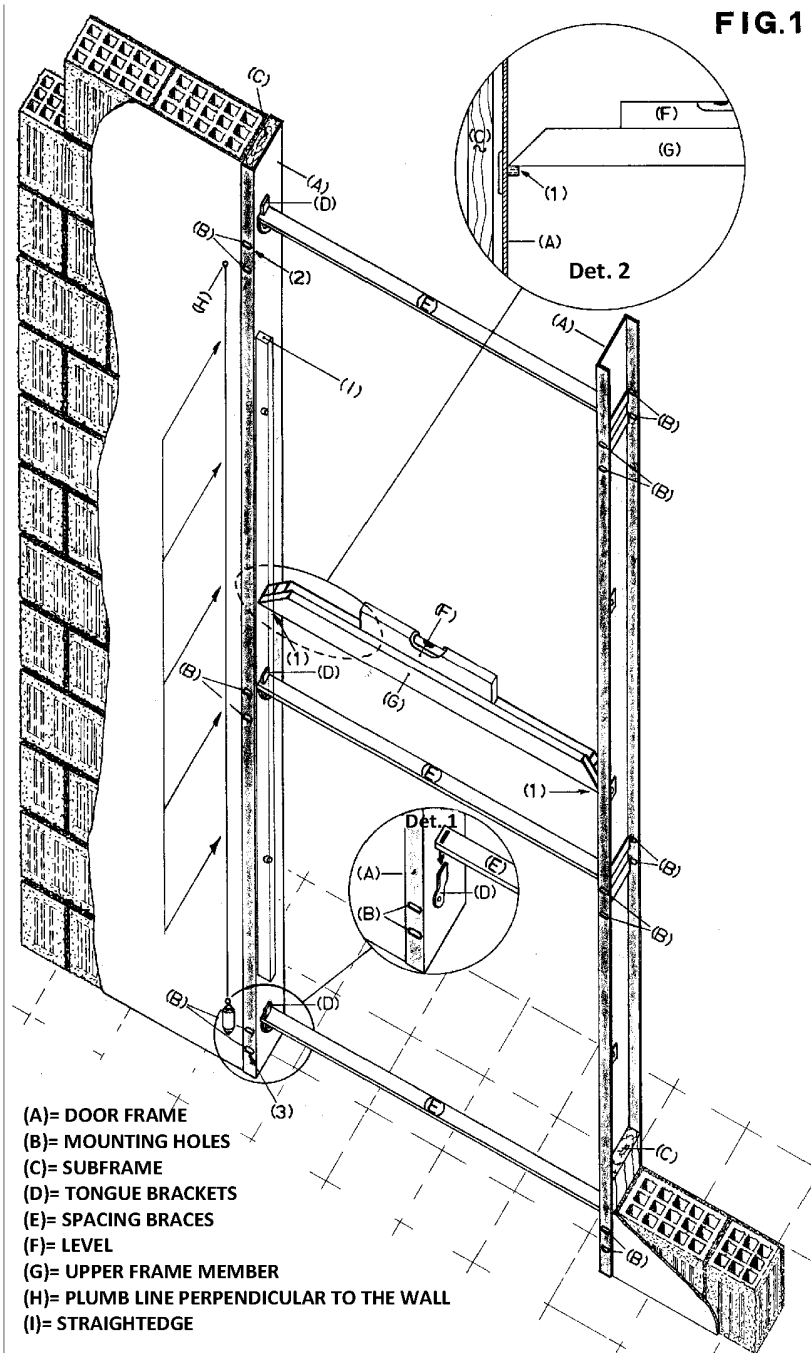


INSTALLATION INSTRUCTIONS FOR A "NORMAL" DOOR

INTRODUCTORY NOTE: This innovative door design differs conceptually from traditional doors. As a result, the tolerances in fitting the door are very strict and particular care must be taken when installing it to ensure perfect door function. The instructions provided herein must be followed carefully by the installer. The first step is to ensure that the subframe has been correctly installed.

INSTALLATION OF THE DOOR FRAME (FIG. 1): The door frame (A) is composed of two galvanized sheet-metal profiles with edges bent over to form two lips, each lip having three pairs of mounting holes (B). The door is installed as follows:



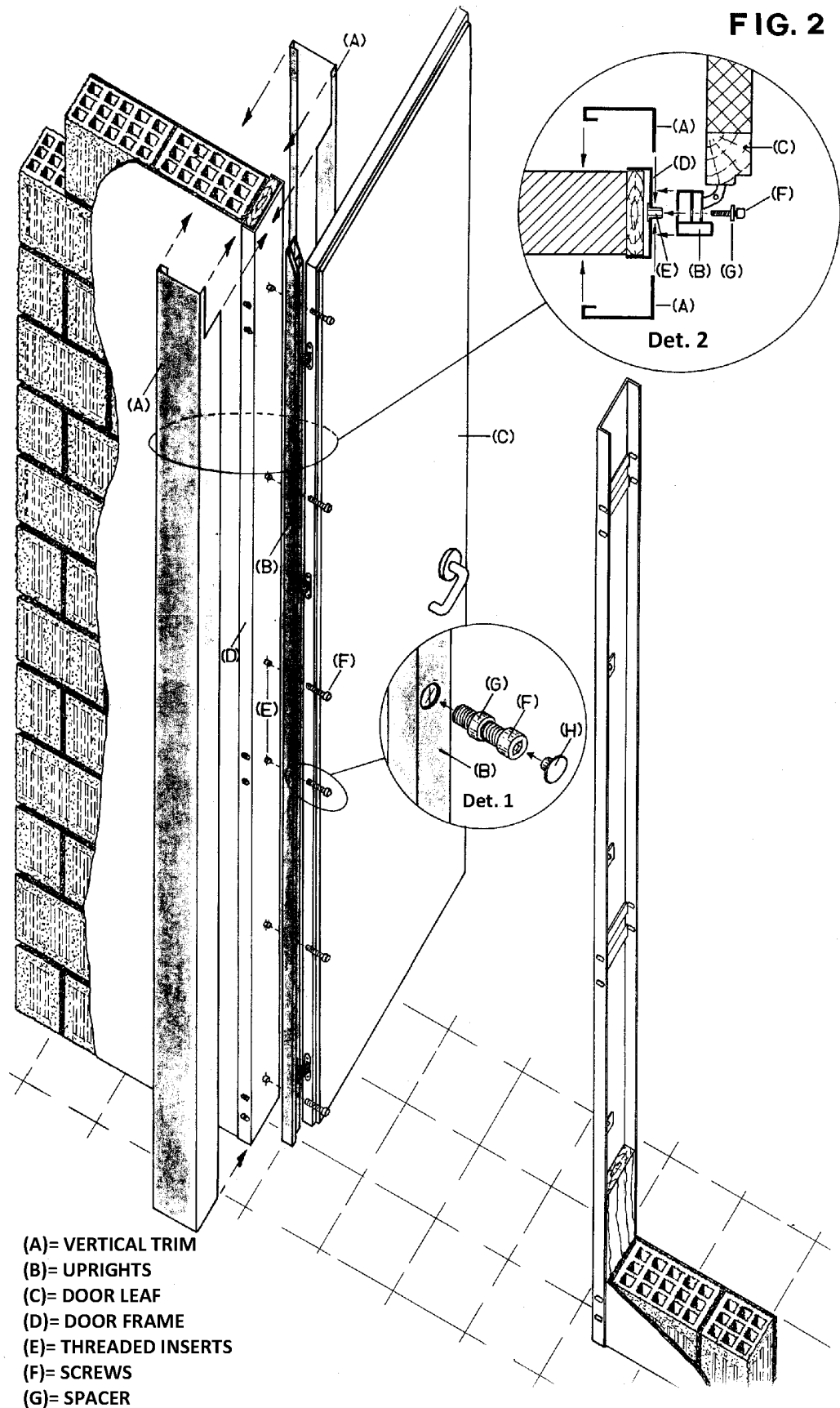
- a) Position the door frame members (A) over the uprights of the subframe (C), one on each side.
- b) Fasten the six tongue brackets (C) to the threaded inserts in the center of the galvanized frame members at the height of the mounting holes, using the provided screws (TCCR M6x12).
- c) Install the spacing braces (E) on the tongue brackets (Det. 1).
- d) Use a level (F) (Det. 2) laid across the upper frame member (G), resting temporarily on two inserts in the door frame at Points 1, to ensure that the two vertical frame members are vertically aligned. Shim one side if necessary to bring them into alignment.
- e) Insert one of the screws provided (sheet-metal or wood screws, depending on type of subframe) through the top mounting hole (Point 2) in one of the frame members and fasten the frame member to the subframe (do not install a second screw through the other lip of the frame member).
- f) Use a plumb line (H) to ensure vertical alignment of the frame member both perpendicularly and parallel to the wall. In some cases it may be necessary to remove the screw from Step e and insert a shim between the frame and the subframe to properly align the frame member.
- g) Once the frame member is perfectly vertical in both directions, fix it in position by inserting the screws through the lower mounting holes (same lip as in Step e) (Point 3), making sure that the frame member is still aligned after tightening the screws.
- h) Before tightening the screws in the middle holes, use a straightedge (I) laid against the inside of the door frame to ensure that the frame member is perfectly straight. If not, use pressure to straighten the frame member and then tighten the screws to fix it in that position.
- i) Repeat Steps e through h for the other frame member, fixing it to the same side of the subframe as its counterpart. This step is facilitated by the three spacing braces, which will keep the two frame members parallel across the door frame. It will thus only be necessary to use the plumb line to make sure the frame member is vertical in the perpendicular direction to ensure that the outside edges of the frame members (A) are coplanar.

l) Install all the screws in the other lip of each frame member. Use shims if necessary to fill any gap between frame member and subframe to prevent the frame member from deforming.

m) Remove the three spacing braces and the six tongue brackets installed in Steps b and c, above.

INSTALLATION OF DOOR LEAF AND VERTICAL TRIM (FIG. 2): The vertical trim comprises 2 pairs of sheet-metal profiles (A) that are mirror images of one another and 2 aluminum profiles (B) or "uprights". The door leaf (C) is supplied with the hinge-side upright already attached to it. The installation of the door leaf simply involves fixing the upright to the door frame (D) as follows:

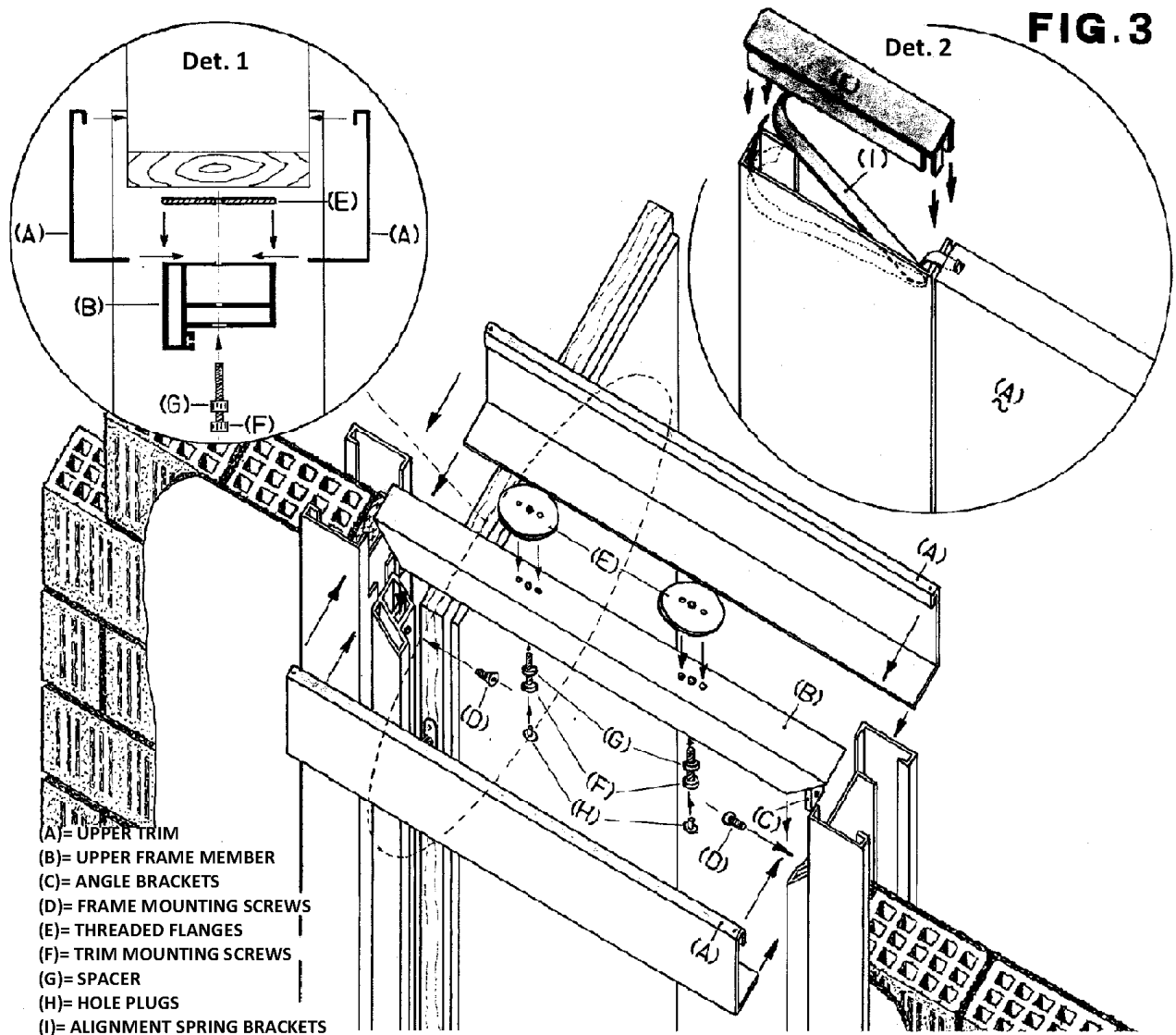
- a) After having determined the direction of door swing, two people grasp the door (C) on either side and position it perpendicularly to the wall (i.e. in the open position) with the upright turned by 90° so that the predrilled holes in the upright line up with the threaded inserts (E) in the door frame.
- b) Insert the provided screws (TCEI M6x25 ZN) (F) and spacer (G) into the holes (Det. 1) and finger tighten, leaving a gap of approximately 3 mm between the door frame and the upright.
- c) Slide the edges of both pieces of sheet-metal trim (A) into the gap until the folded edge of the trim is resting against the wall on either side (Det. 2).
- d) Tighten the screws (F) and plug the holes with the plastic covers provided (H).
- e) Repeat the same steps to install the second upright on the other side.



- (A)= VERTICAL TRIM
(B)= UPRIGHTS
(C)= DOOR LEAF
(D)= DOOR FRAME
(E)= THREADED INSERTS
(F)= SCREWS
(G)= SPACER

INSTALLATION OF THE UPPER TRIM (FIG. 3): The upper trim consists of: 2 sheet-metal profiles (A) that are mirror images of one another; an aluminum profile (B) known as the "upper frame member" with preinstalled angle brackets (C) at each end to anchor the upper frame member to the vertical frame members by means of two screws (D). 2 or 3 threaded flanges (E) are also provided, complete with screws (F), to fasten the sheet-metal profiles (A) to the upper frame member. The alignment of the side trim with the upper trim (A) is ensured by spring brackets (H) at the four top corners. The trim is installed as follows:

- Open the door and position the upper frame member (B) so that the angle brackets (C) at either end fit into the two vertical frame members. Insert one screw (TSPEI M5x8 ZN) (D) on either side and tighten.
- Install the threaded flanges (E) one at a time on the upper frame member so that the pegs on the flanges go into the holes in the upper frame member to prevent it from rotating.
- Insert a screw (TCEI M6x25 ZN) (F) and spacer (G) into the corresponding hole in the upper frame member and finger tighten it to the threaded flange, leaving a gap of approximately 3 mm between the frame member and the flange.
- Slide the edges of the two sheet-metal profiles (A) (upper trim) into the gap until their outer edges are resting against the wall (Det. 1).
- Tighten the screws (F) and plug the holes with the plastic covers provided (H).
- Put a spring bracket (I) at all four top corners between the side trim and the upper trim (A) and close the hole with the provided plastic plugs (L) (Det. 2).



FINAL STEPS, ADJUSTMENT AND CHECKS: Manufacturer's settings provide the following clearances: 2 mm between the top of the door and the upper trim; 1 mm between the door leaf and the upright on the hinge side; and 3 mm between the door leaf and the upright on the latch side. If this is not the case or door actually touches any part of the trim, check the vertical and horizontal alignment of the door frame. Should the door be classifiable as an "extraneous conducting part" per CEI 64-8 because it may give rise to ground loop, it must be connected to the building earthing system.