Read all instructions before starting installation.

**PACK CONTENTS**

- **Pack 1 (51A4)**
  - [Diagram of Pack 1 contents]
- **Pack 2 (FIX-DUMMY)**
  - [Diagram of Pack 2 contents]

**IMPORTANT:** This closer should be installed by a competent installer who must pass these instructions on to the site or maintenance manager once the closer has been satisfactorily installed. No responsibility can be accepted by the manufacturers if these installation instructions are disregarded.

**Note:**
1. For Side Load and End Load (AFT) installation, please refer to page 2.
2. The thread of all fixings should be applied with Loctite 222 or similar and securely fastened.

**TRANSOM HEADER BAR, 70MM PIVOT POINT**

Prepare transom/header bar and cover plate to accept closer mechanism as detailed below:

- Fix jamb bracket to jamb with 5 No. M5 x 24mm screws, washers and nuts.
- Drill clearance holes and countersink header bar for 2 No. M6 x 10mm screws and 2 No. M6 x 15mm countersunk bolts.
- Fit steel angle bracket to header bar using the 2 No. M6 x 15mm bolts, locking washers and nuts.
- Locate the two fixing lugs into jamb bracket and raise the rear end of the closer into position.
- Fit the 2 No. M6 x 15mm round head bolts and flat washers through the angle bracket and the 2 No. M6 x 15mm round head screws and lock washers into the closer lugs.
- Once the 70mm pivot centre has been achieved tighten the M6 bolts securely. Centre the closer.

**HINGE JAMB**

For front bracket, you have two options ① or ②, depending on the fixing hole used.

- Select fixing holes most suitable for section and drill clearance size for M5 screws.

**INSTALLATION TO ERECT THE DOOR**

As supplied, the square pivot of the closer sits in the central (closed) position. Using grips and suitable leverage rotate the square pivot to the 90° position. In the case of an NHO closer with the closing speed adjuster in fully to give sufficient time to load the door into position.

- Holding door at approximately 15° position, lower onto the pivot bolt and swing the door into the vertical position locating the closer spindle into the arm recess.
- Minimum dimensions of transom and door

**DOOR ADJUSTMENTS**

- **Closing Speed Adjustment**
  - Turn clockwise for slower speed
  - Anti-clockwise for faster speed

- **Hold Open Options**

- **Closing Range**
  - 1. Closing range
  - 2. Latching range
OPTIONS FOR ARM INSTALLATION

SIDE LOAD - TOP ARM & CHANNEL, 70MM PIVOT POINT

Prepare the top rail of the door as detailed, ensuring that the internal faces of the stile and top rail have been cut away to enable the closer spindle to be engaged during door hanging.

Drill 7mm hole in the heel of the door giving access to the adjustment screw. Fit steel arm channel to top rail using the 4 No. M6 countersunk screw. Fit the adjustment screw into the channel post and the 2 No. alignment bolts into the arm.

Place the arm into the channel and fit the large countersunk washer and socket head screw. Slide the arm centrally over the pre-punched pivot mark in the channel and adjust position with screw. Unwind alignment bolts equally.

Tighten all fixings.

END LOAD AFT - TOP ARM & CHANNEL, 70MM PIVOT POINT (65MM with S1AS)

Prepare the top rail of the door as detailed, ensuring that the internal faces of the stile and top rail have been cut away to enable the closer spindle to be engaged during door hanging.

Drill 7mm hole in the heel of the door giving access to the adjustment screw. Fit steel arm channel to top rail using the 4 No. M6 countersunk screw. Fit the adjustment screw into the channel post and the 2 No. alignment bolts into the arm.

Place the arm into the channel and fit the large countersunk washer and socket head screw. Slide the arm centrally over the pre-punched pivot mark in the channel and adjust position with screw. Unwind alignment bolts equally.

Tighten all fixings.

SHORT SIDE LOAD AFT - TOP ARM & CHANNEL, 65MM PIVOT POINT

Prepare the top rail of the door as detailed, ensuring that the internal faces of the stile and top rail have been cut away to enable the closer spindle to be engaged during door hanging.

Drill 7mm hole in the heel of the door giving access to the adjustment screw. Fit steel arm channel to top rail using the 4 No. M6 countersunk screw. Fit the adjustment screw into the channel post and the 2 No. alignment bolts into the arm.

Place the arm into the channel and fit the large countersunk washer and socket head screw. Slide the arm centrally over the pre-punched pivot mark in the channel and adjust position with screw. Unwind alignment bolts equally.

Tighten all fixings.

BOTTOM PIVOT ASSEMBLY - 70MM PIVOT POINT

Prepare the bottom rail of the door to accommodate the pivot shoe with 2 No. drilled and tapped M6 holes at 98.5mm and 143mm centres. Fit pivot shoe to underside of door, through the slotted holes with 2 No. M6 x 16mm round head screws and lockwashers.

The centre hole should be drilled and tapped on site when correct alignment of the door has been achieved.

THIS FINAL FIXINGS MUST BE USED.

If an aluminium threshold is being used prepare as shown below.

The 5mm thick plate is held in position by the M5 countersunk screw and the pivot bolt can be installed. Determine the correct height of the pivot and tighten the locknut.

If the bolt protrudes below the base of the threshold the excess must be removed or the floor level drilled accordingly.