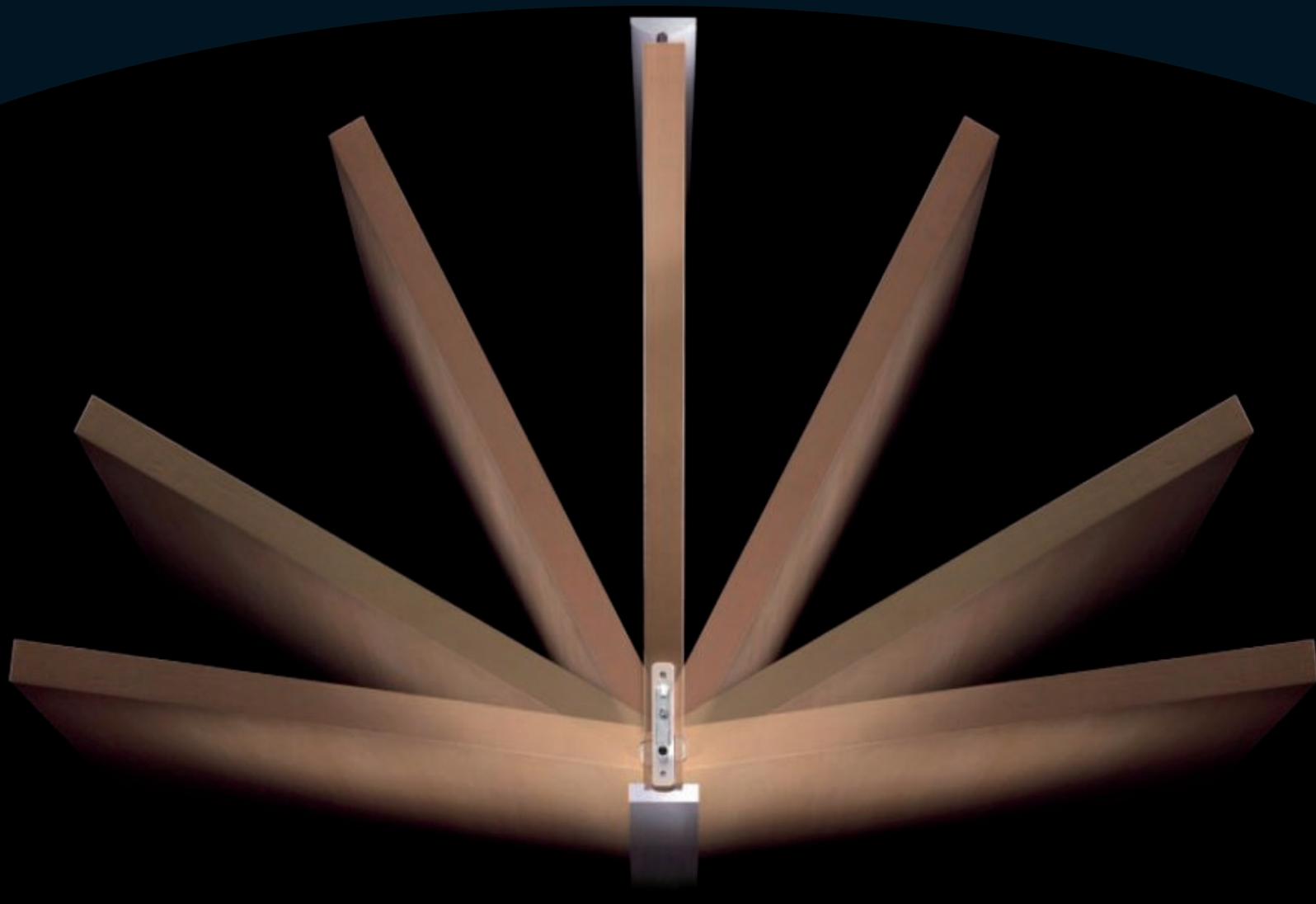
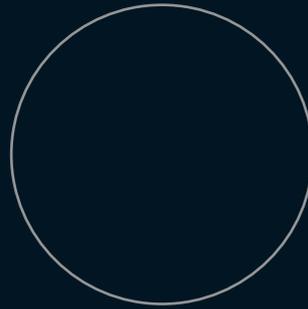
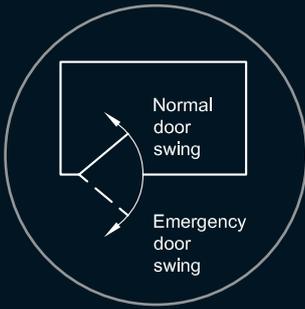




The Emergency Release Pivots Directory

Issue Two





Renowned research, development,
innovation and quality

HI-LOAD Double Action pivot sets for emergencies

25 year HI-LOAD guarantee

Radiused options for easy fitting

Stainless steel 304/316 for superior corrosion resistance

Royde & Tucker are active supporters of independent trade bodies in order to keep abreast of market trends and the needs of the customer.





Introduction to Royde & Tucker

Royde & Tucker are the UK's leading manufacturer, supplier and distributor of high quality Architectural Hardware.

With a long and recognised reputation for product reliability, durability and ingenuity the R&T ethos has always been, and remains, one of providing the Architect, specifier and building owner an unrivalled product and service solution.

Performance Engineering

One reason for the success of the Royde & Tucker range of hinges and pivots is the ability of the company to undertake special projects, especially the design and manufacture of special hinges e.g. Anti-ligature (and other associated products) for any application and any special purpose.

HI-LOAD is unique in construction and performance. Designed for longevity and as a 'fit and forget' solution, HI-LOAD products do not wear, will not fail and require no maintenance.

In the UK, HI-LOAD products are offered with a 25 year performance guarantee.

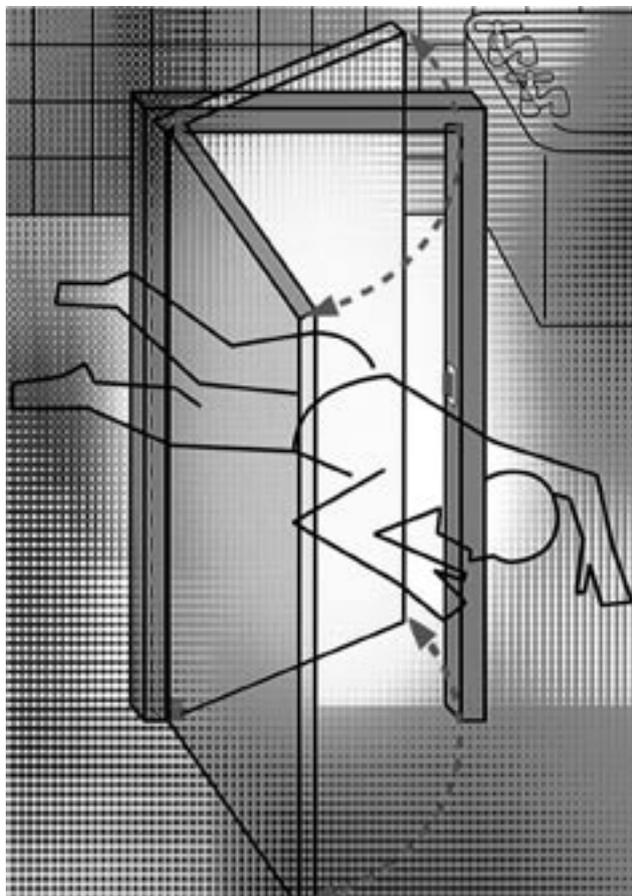
Contents

Guide to the specification of door pivots	02
Double action doorset	04
Pivot options	06
Emergency stops/releases	07
Double action locks & strikeplates	08
Frame/floor mounted double action pivot set	09

A guide to the specification of door pivots

Doors which ordinarily open in one direction only, but which are required to open in the opposite direction in certain situations, can be fitted with a pivot hinge and emergency release bolt or stop.

The situation might arise, for example, in relation to an inward opening door to a wheelchair accessible WC. It is important that the door can be opened outward in the event that someone falls against the back of the door. If the person has lost consciousness or is unable to move themselves the only way of gaining access is through a double action pivot set. In addition all locks and indicator bolts should incorporate an emergency release facility.



Accessibility

Approved Document "M" states with relation to this situation "Preferably, all doors to WC cubicles and wheelchair-accessible unisex toilets open out or, if they open in, the door swing should not encroach into the wheelchair turning space or minimum activity space.", in addition "WC compartment doors, and doors to wheelchair-accessible unisex toilets, changing rooms or shower rooms have an emergency release mechanism so that they are capable of being opened outwards, from the outside in case of emergency".

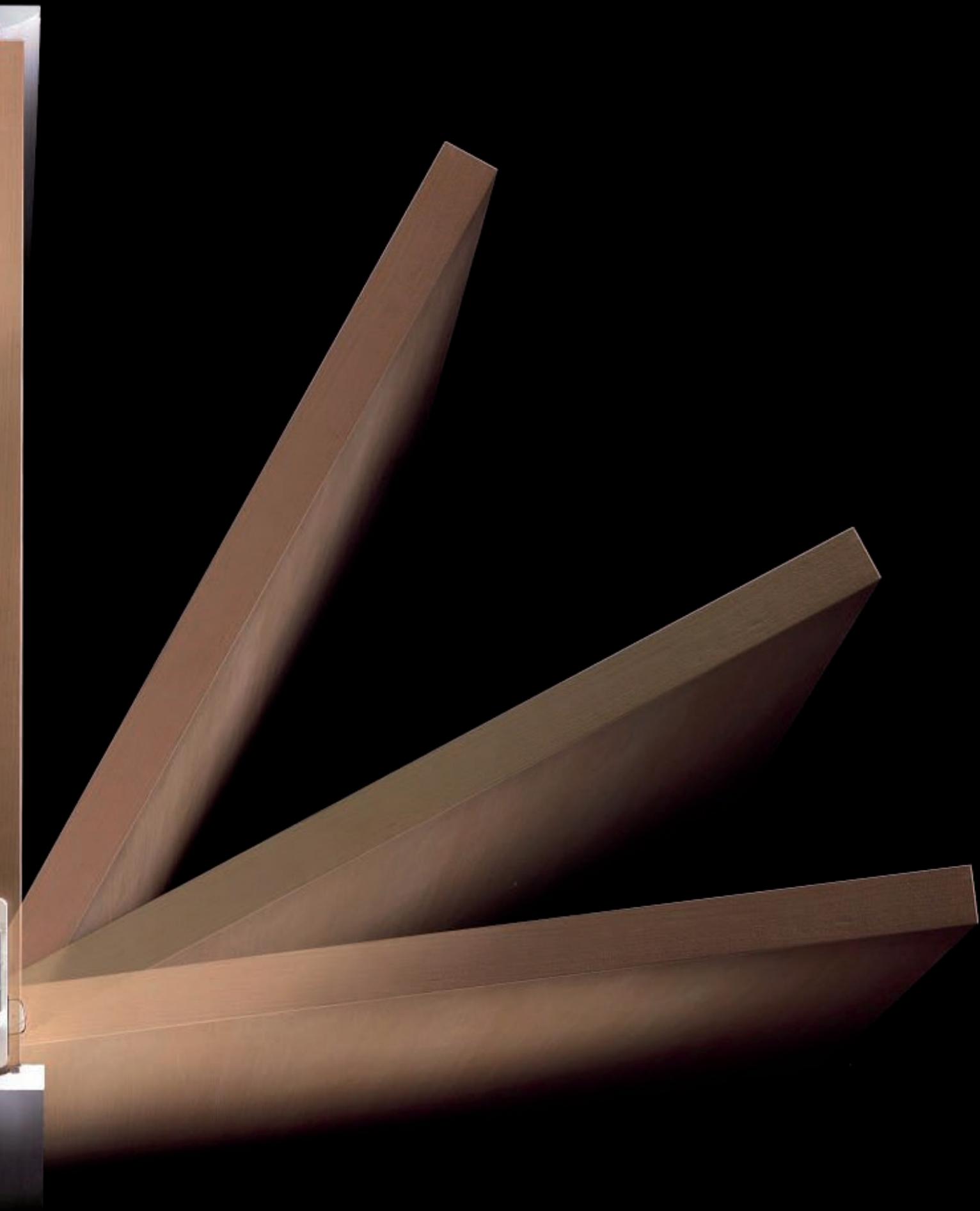
The problem with outward opening doors is that they can be dangerous if opening into a corridor or fire escape route. The Double Action pivot set eliminates this danger.

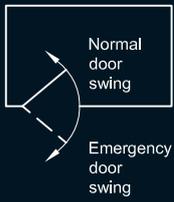
Anti barricade

Double Action pivots are also useful in secure situations where an anti barricade facility is required to allow access if the door is being forcibly prevented from opening inwards.

Aesthetics

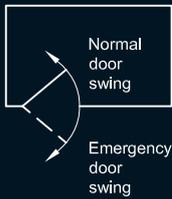
Frequently pivots are specified where there is an aesthetic requirement to not have any hinge knuckles showing, for example, on riser doors in corridors.





The Double Action Doorset

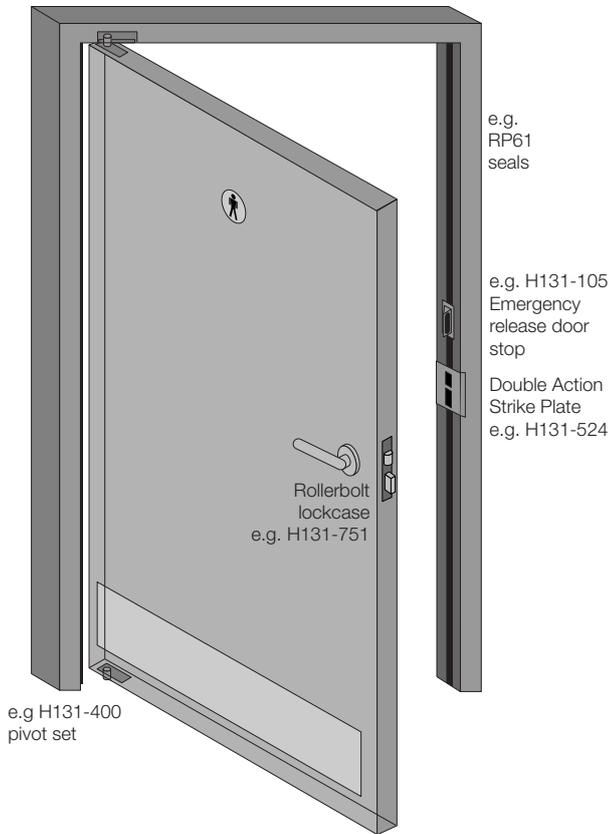




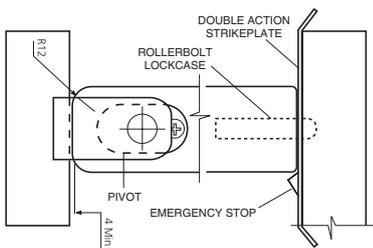
The Double Action Doorset



Door centrally mounted in frame



Pivot mounted centrally within the door frame (standard frame detail)

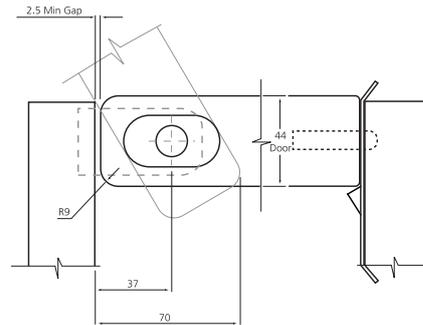


- Door pivots 90° in either direction
- A suitable door stop is recommended on the internal side of the door
- A suitable door stop is also recommended on the external side if the door is opened outwards frequently
- For a 54mm thick door the door also pivots 90° in either direction

Door offset in frame

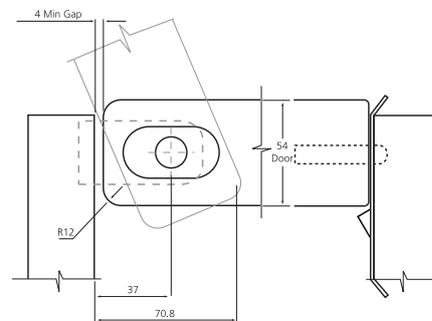
Locating the pivot using a standard door frame and a 44mm thick door with a R9 door radius at the pivot edge.

Pivot/door offset in the frame (standard frame detail)



- Door pivots 90° outwards and 120° inwards
- A suitable door stop is recommended on the internal side of the door
- A suitable door stop is also recommended on the external side if the door is opened outwards frequently

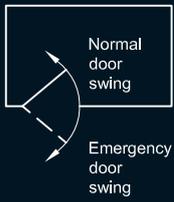
Locating the pivot using a standard door frame and a 54mm thick door with a R12 radius at the pivot edge



- Door pivots 90° outwards and 112° inwards
- A suitable door stop is recommended on the internal side of the door
- A suitable door stop is also recommended on the external side if the door is opened outwards frequently

EXAMPLE SPECIFICATION (44mm door centrally mounted)

H131-400	Pivot
H131-105	Emergency Stop/Release
H131-524	Two-way Strikeplate
H131-751	Heavily sprung Rollerbolt Lockcase (for unsprung furniture)



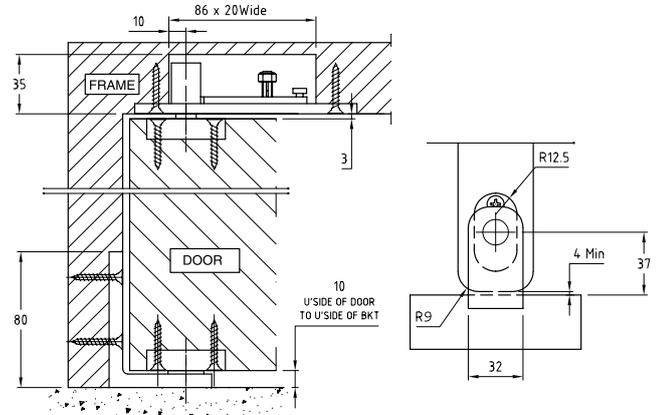
Pivot Options



H131-400

Frame Mounted Double Action Pivot Set (medium duty)

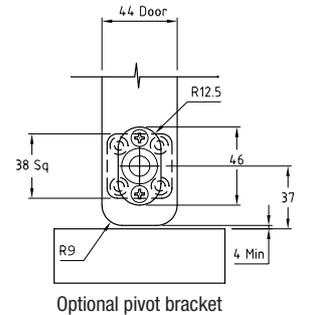
- Allows the door to swing in either direction
- Door plates radiused for easier preparation
- Minimum door thickness 44mm
- Satin stainless steel 304
- Bottom bracket is frame mounted
- Medium duty for internal doors
- For doors weighing up to 80kg when floor mounted and up to 1100mm wide
- Top and bottom door plates have oil impregnated bronze bearings
- Set includes door bottom pivot, top centre, No.10 screws to suit
- Suitable for use on FD30 fire doors
- For adjustable unit see H131-450 (below)



H131-402

Floor Mounted Double Action Pivot Set (medium duty)

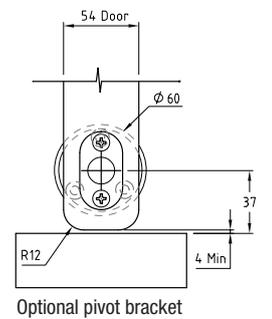
- As H131-400, but inclusive of floor mounted bottom bracket (right)
- For doors weighing up to 80kg and up to 1100mm wide
- Suitable for use on FD30 fire doors
- For adjustable unit see H131-452 (below)



H131-401

Floor Mounted Double Action Pivot Set (heavy duty)

- As H131-400, but inclusive of floor mounted bottom bracket (right)
- Heavy duty for doors weighing up to 120kg and up to 1100mm wide
- Suitable for use on FD30 fire doors
- For adjustable unit see H131-451 (below)



Adjustable versions

H131-450 (shown)

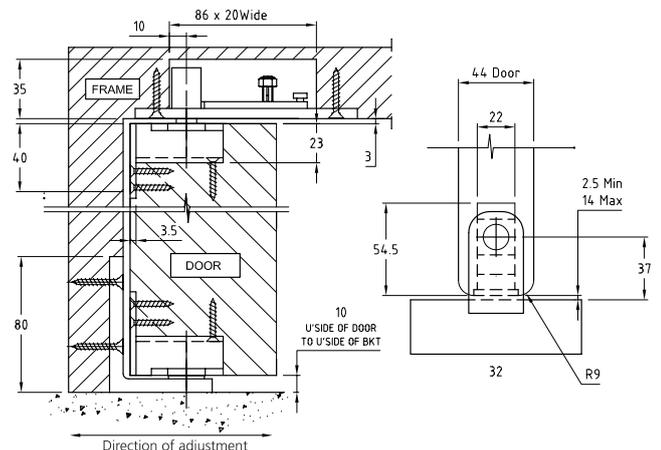
- As H131-400 but with adjustable top centre and bottom pivot
- Allows +/-5.5mm lateral adjustment at head and base of door

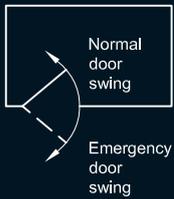
H131-452

- As H131-402 but with adjustable top centre and floor mounted pivot
- Allows +/-5.5mm lateral adjustment at head and base of door

H131-451

- As H131-401 but with adjustable top centre and floor mounted pivot
- Allows +/-5.5mm lateral adjustment at head and base of door





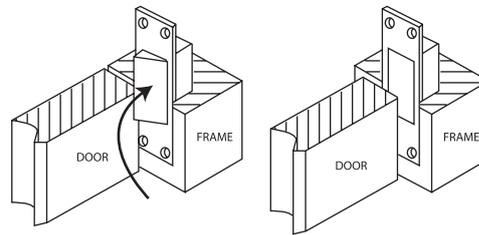
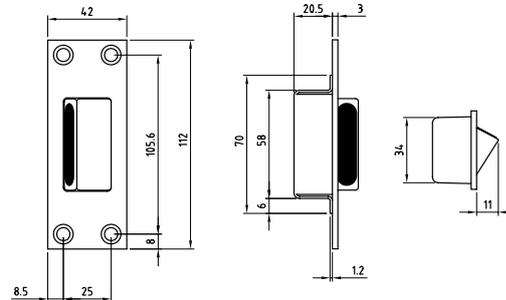
Emergency Stops/ Releases



H131-105

Emergency Release Door Stop

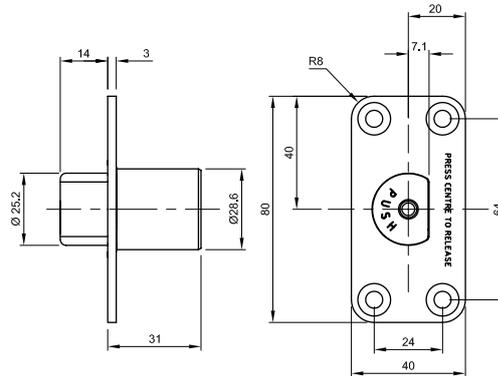
- Allows Double Action doors to operate as single swing when hung on pivots
- Emergency access is gained by depressing the stop and pulling the door outwards
- Grade 304 stainless steel
- Stop release resets automatically
- Rubber insert for quieter action
- Key operated 'lock out' version available (H131-108 R/H, H131-109 L/H)



H131-106

Emergency Release Door Stop with Holdback

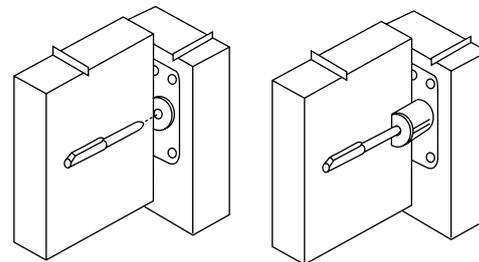
- Allows Double Action doors to operate as single swing when hung on pivots
- Emergency access is gained by depressing the stop and pulling the door outwards
- Includes holdback facility
- Grade 304 stainless steel
- Stop release resets automatically
- Complete with No10 screws



H131-107

Emergency Release Door Stop with Lock-In/ Out and Holdback

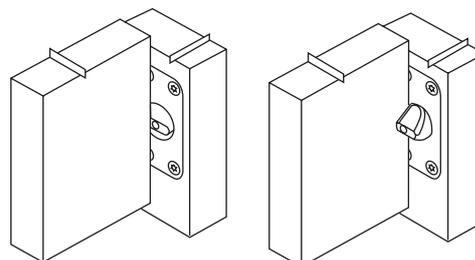
- As above. In addition, the stop can be "locked" in the In OR Out position to e.g. prevent tampering.

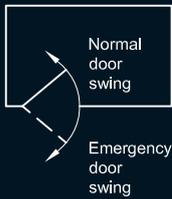


H131-300 (Anti-ligature)

Anti-ligature Emergency Release Door Stop with Lock-In/Out and Holdback

- The H131-300 is an Anti-ligature version of the H131-106, tested and approved to TS 001: "Door mounted Anti-ligature devices for Safety & Security purposes".



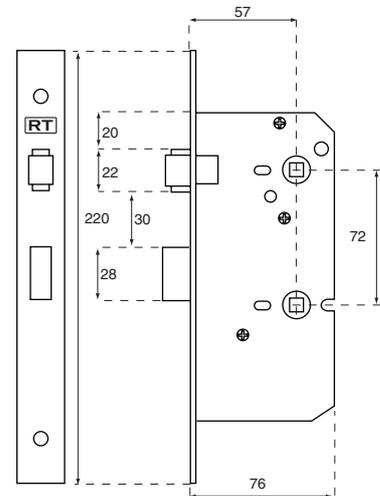


Double Action Locks & Strikeplates



Roller bolt bathroom mortice lock

- Roller bolt operated by lever handle from either side.
Deadbolt operated by turn from either side.
- Pierced to accept 38mm centre horizontally and diagonally opposed bolt through fixing furniture and 38mm centre horizontally opposed bolt through fixing indicator furniture.
- Brass roller bolt to suit either hand. Projection 12mm.
- Brass deadbolt, 14mm throw.
- Brass latchbolt follower, to suit 8mm square spindle.
One-way action.
- Brass deadbolt follower, to suit 8mm square spindle.



Parts

H131-750

Double Action 72mm rollerbolt lockcase, lightly sprung for sprung lever furniture, complete with 8mm followers (to suit bathroom furniture)

H131-751

As H131-750, but heavily sprung for unsprung lever furniture

H131-755

Double Action 57mm rollerbolt lockcase, complete with 8mm followers (to suit bathroom furniture)

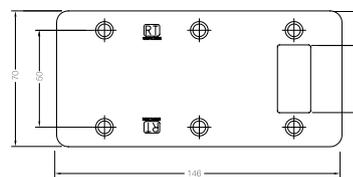
H131

Two Way Striking Plates for use with Double Action Door Stop

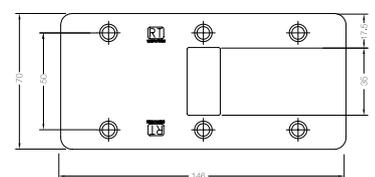
To be used in conjunction with Royde & Tucker's H131-750/751 rollerbolt lockcases (above). For strikeplate to suit H131-755 please contact the sales office.

- Brushed Stainless steel grade 304

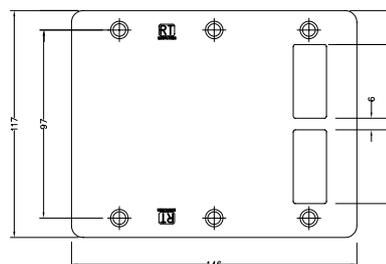
H131-053 (offset)



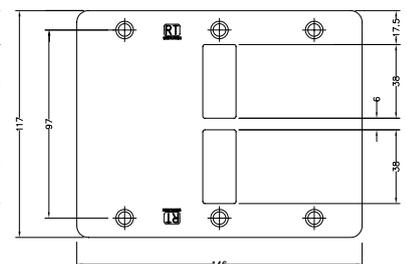
H131-055 (central)

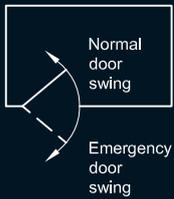


H131-523 (offset)



H131-524 (central)



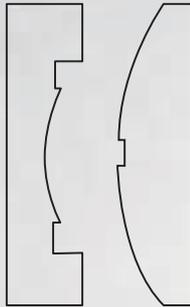


The Residential Double Action Doorset



Changing domestic requirements have led to an increased use of double action pivots for residential installations; particularly in the case of sheltered accommodation and housing for the less able. These products facilitate users to lead more independent lives without feeling intrusive or institutional.

The below can be used to easily install a double action door or convert an existing door. Pivots can and are installed using standard flat door linings, however the geometry that allows the door to open in both directions also requires that a radius be put on the heel edge of the door. Putting an accurate radius along the door's entire length can be troublesome and in some situations damage the integrity of the door leaf.



To alleviate this conundrum Royde & Tucker supply convex and concave frame linings which negate the requirement for a pivot edge radius and make for a quick and easy installation. The convex and concave door jamb fillets allow any standard door to be used without having to radius the door's pivot edge.

Doorsets using this solution are permanently double action and therefore always outward opening, this is particularly useful for older or infirm users or users with a disability as they tend to find it easier to push a door outwards rather than try and pull the door towards them as well as moving out of the door's opening arc to get out.

H131-780 Frame/Floor Mounted Double Action Pivot Set (light duty)

- For doors weighing up to 20kg for frame mounting and 40kg if floor mounted and 950mm wide (light duty for internal domestic doors)
- Allows the door to swing in either direction
- Door plates radiused for easier preparation
- Minimum door thickness 38mm
- Mild steel, white powder coated
- Top and bottom door plates have oil impregnated bronze bearings

N.B. For installation, especially retrofit, the door aperture will need to be 40mm wider than the door leaf being installed.

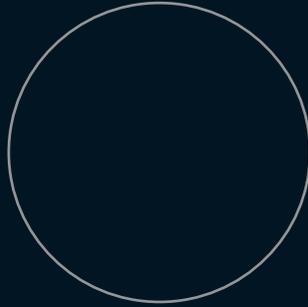
• Set includes:

- H131-700 Door bottom pivot & top centre with no.10 screws to suit
- H131-750 Double action 72mm rollerbolt lockcase (lightly sprung for sprung door furniture) complete with curved double action strikeplate
- H131-775 Pre-machined radiused door jambs and brush seals





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Published 2009

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