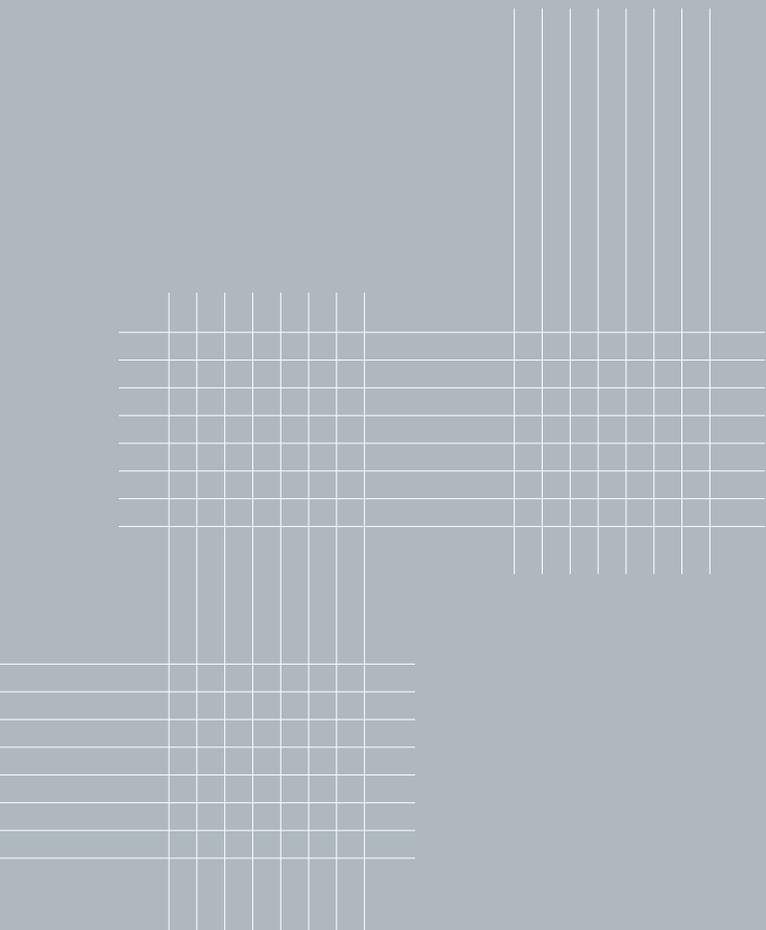




# centor

ES2 integrated screening system for bifold doors

centor®



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NO MORE COMPROMISES

Putting an end to the compromises between uninterrupted views and unrestricted movement and the need to eliminate unpleasant flying pests Centor ES2 continues the evolution of the E2 bifold system.

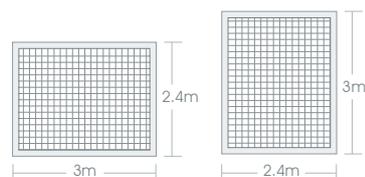
Including a world-first fully integrated insect screening solution for bifold scale openings, ES2-based doors are ready for action as soon as temperatures allow. The rest of the year the screen system can be rolled back out of view, with hardware integrated into the architecture of the door frame itself.

Created for real life use, ES2 allows for child friendly operation with fingertip ease using a simple magnetic catch which is operable from any height on the stile. Once positioned the screen can be released without fear of slamming shut. The tough mesh used in the screen is hardwearing and resistant to damage from pets.

#### ES2 Specifications

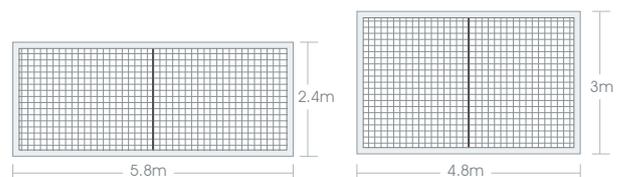
|                  |  |
|------------------|--|
| max panel weight | 40kg   |
| max panel width  | 1000mm   |
| max frame size   |  |
| double screen    | 2400mm (H) x 5800mm (W)<br>3000mm (H) x 4800mm (W) |
| single screen    | 2400mm (H) x 3000mm (W)<br>3000mm (H) x 2400mm (W) |
| door thickness   | 38-40mm  |

#### Single Screen



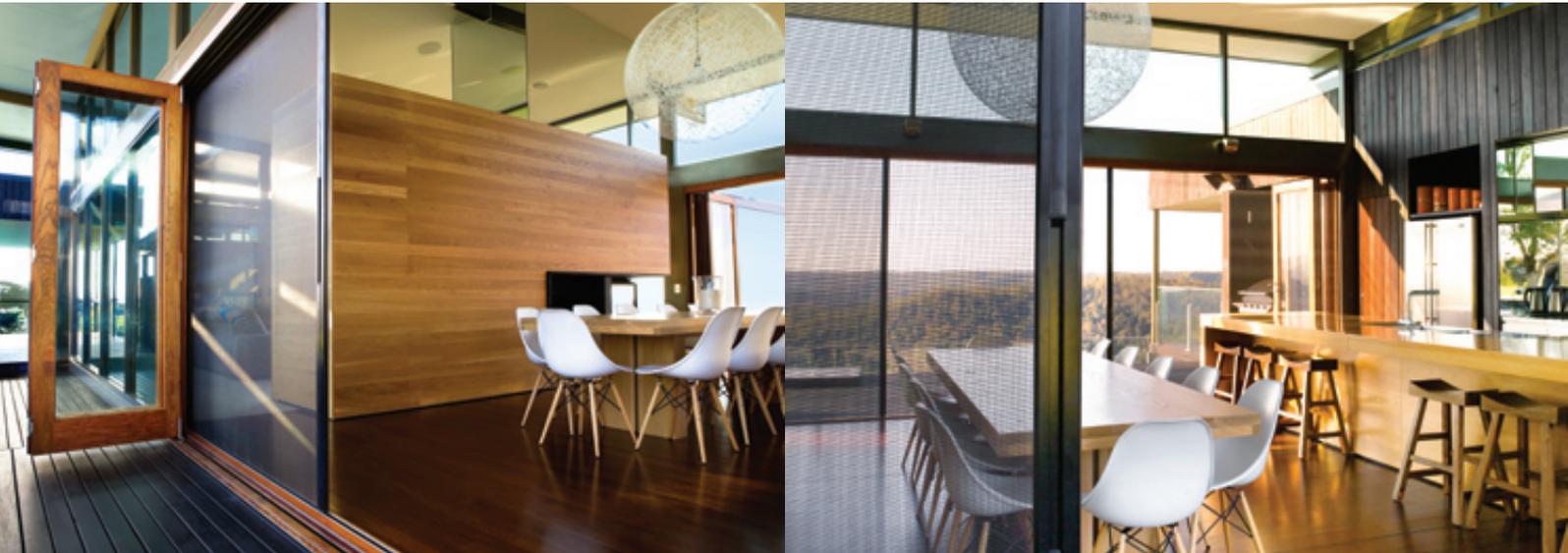
A single screen up to 2.4m high may be up to 3m wide, while a single screen above 2.4m high up to 3m high may be up to 2.4m wide

#### Double Screen



A double screen up to 2.4m high may be up to 5.8m wide, while a double screen above 2.4m high up to 3m high may be up to 4.8m wide

# SCREEN BIFOLD OPENINGS UP TO 3M HIGH BY 4.8M WIDE



BUILT TOUGH AND TESTED

Once again Centor's commitment to research and development has produced a product as advanced as it is functional. Integrated into the architecture of the door frame itself ES2 functions simply and smoothly. Features built into ES2's screen system include:

#### **Load Balancing Technology™**

Load Balancing Technology (LBT™) (patent pending) allows for the effortless fingertip control synonymous with Centor products. With no crude spring-loading to fight against, the screen's lead-stile remains firmly in any chosen position until further pressure is applied. Load-balancing also means far greater tension across the screen, eliminating any tendency for sag.

#### **Tight Technology™**

Tight Technology™ manufacturing techniques ensure control of the horizontal edges of the screen so they remain straight and tight across the widest spans.

#### **Shock Absorption**

A shock absorption system allows visitors taken in by the screen's unobtrusiveness and near invisibility to walk away with no more than a surprise – and no system damage.

#### **Self-Feeding Mechanism**

Should strong winds blow the screen out of the top or bottom channels the screen will self-feed back onto the roll.

#### **Materials**

ES2 is manufactured entirely in stainless steel, brass and reinforced engineering polymers. Tough PVC-coated polyester mesh used in the screen, is hardwearing and resistant to damage from pets. The mesh is easy to clean and can be replaced.

#### **Testing**

The screen system has undergone cyclic testing to 50,000 operations in a laboratory and been extensively exposed to dust, mud, sand and corrosive atmosphere. It has stood up to impact testing with a 17kg punching bag 100 times and considerable pushing, poking and prodding to simulate real life usage.

# THE WORLDS FIRST FULLY INTEGRATED SCREEN FOR BIFOLD SCALE OPENINGS



| Product Detail                  | Description                       |
|---------------------------------|-----------------------------------|
| door size H x W                 | 2160 x 2890                       |
| material of construction        | sashes and frame WRC, sill Merbau |
| glazing                         | 6,38 clear laminated glass        |
| panel configuration & thickness | 4L – 40mm                         |

| Test Data                   | AS2047 min | ES2             |
|-----------------------------|------------|-----------------|
| min water rating            | 150Pa (N1) | 300Pa (N5 – C3) |
| max air infiltration (75Pa) | 5 l/s/sq M | 0.57 l/s/ sq M  |
| performance rating Pa       | N1 (500Pa) | N2 (700Pa)      |
| structural rating ULS       | N1 (700Pa) | N2 (1000Pa)     |

Test results of Centor's ES2 Insect screen bifold door system tested to the applicable requirements of AS 2047-1999 in a NATA certified testing facility.

## AUSTRALIAN STANDARDS

Currently there is no Australian Standard specifically for external bifold doors, however Australian Standard AS 2047-1999 *Windows in Buildings – Selection and Installation* specifies materials and performance requirements for external windows and doors. The wind load, weather and operational performance specified for other types of external windows and doors could reasonably be expected to apply to an external folding door system used in the same application. Centor recommends that all users obtain a copy of AS 2047 and AS 4420 from Standards Australia.

Centor has tested an ES2 insect screen folding door system to the applicable requirements of AS 2047-1999 in a NATA certified testing facility (Test No. AZT0100) and obtained the results shown in the table above.

This performance data is an indication of the ratings that can be achieved with appropriate door design and manufacture. Centor does not manufacture complete door systems but supplies both the folding hardware and outer frame incorporating ES2 to door manufacturers for assembly and construction. The Centor technical department can assist manufacturers in the design and testing process for doors incorporating Centor Insect Screen systems to ensure the required performance criteria for a complete assembled folding door system meets similar standards.

### Specifying ES2

For detailed component selection specifiers can utilise ES2 Screencalc, Centor's free specification and ordering software. ES2 Screencalc is available from [www.centor.com.au](http://www.centor.com.au)

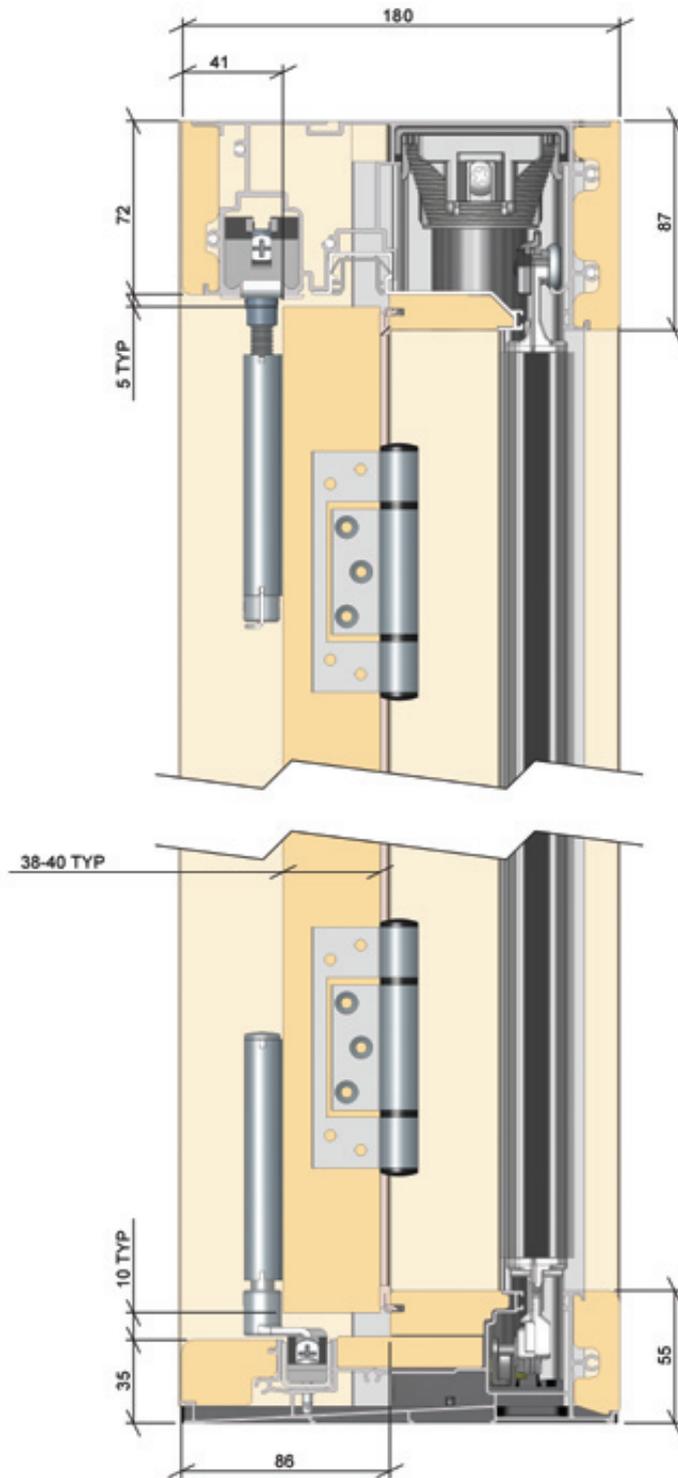
Architects and Designers can feel comfortable simply specifying "Centor ES2" and leaving detailed component selection to the builder, joiner or fabricator.

### Warranty

Centor Architectural offers a 5 year limited warranty on its ES2 Insect Screen.



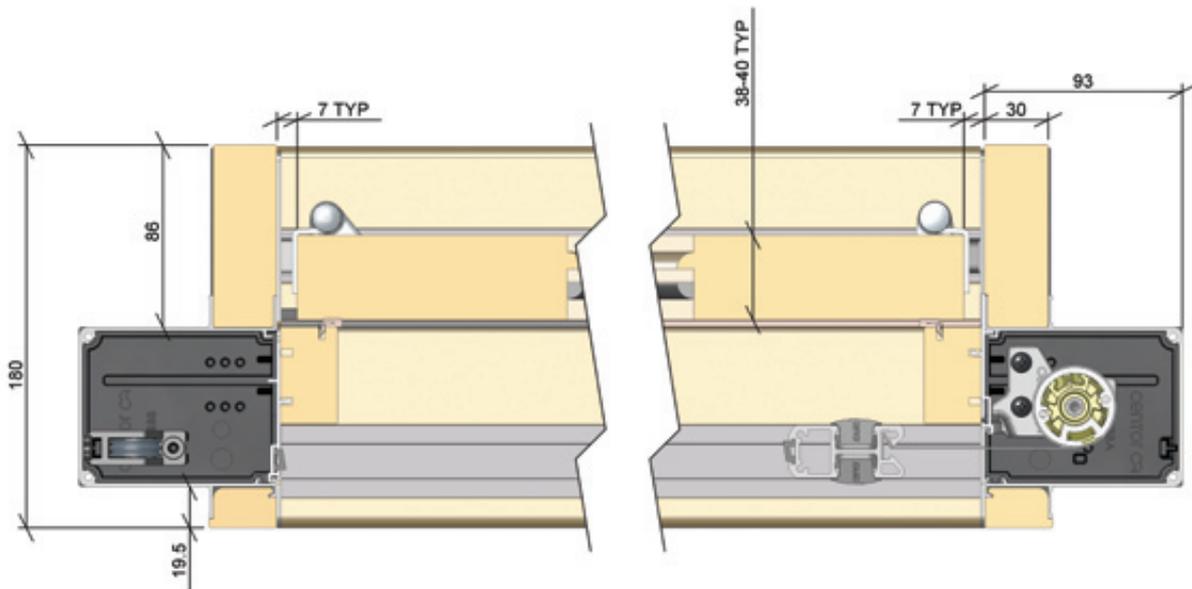
ARCHITECTURAL DETAIL  
Vertical Profile



Patent Pending

ARCHITECTURAL DETAIL

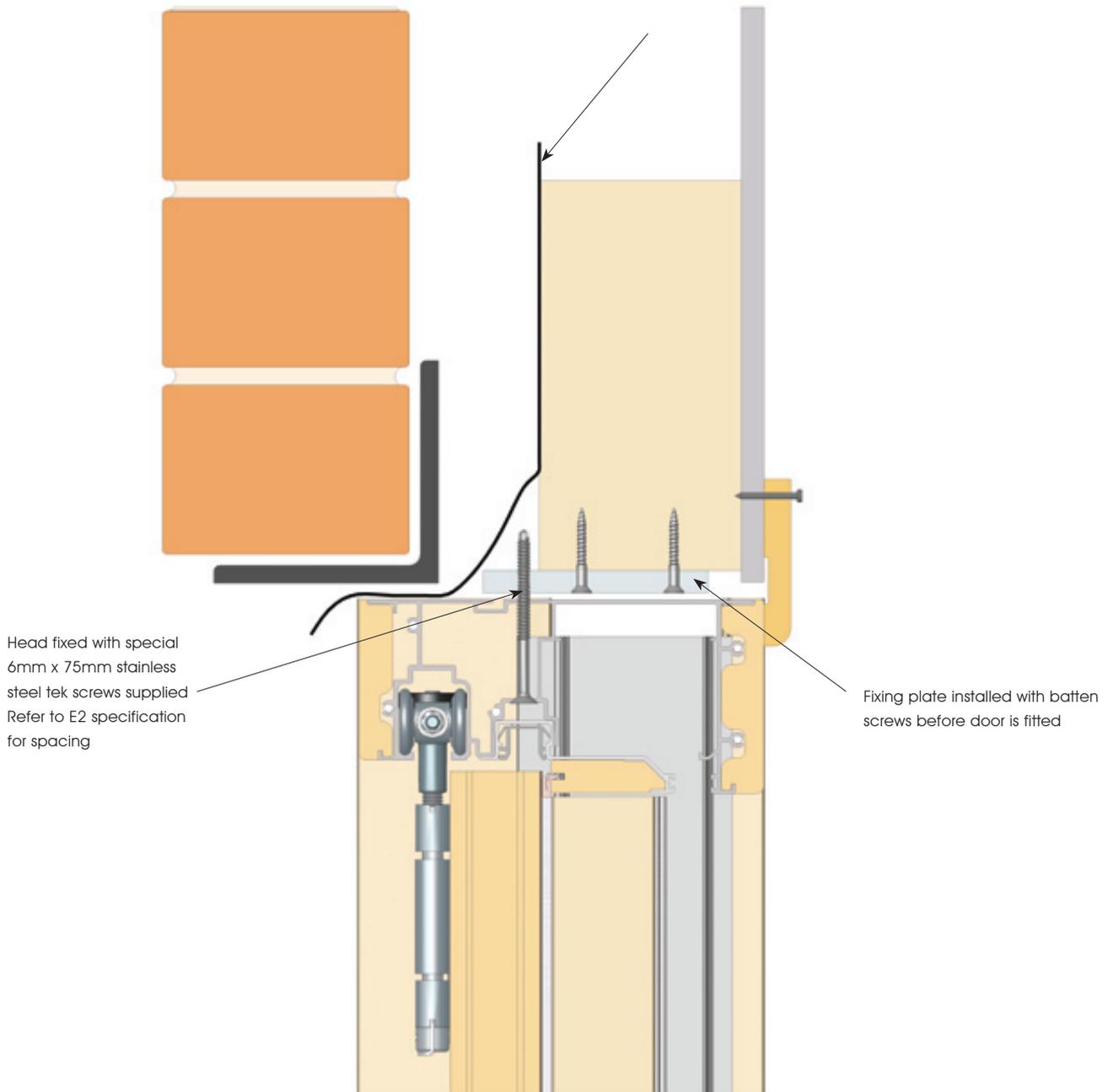
Horizontal Profile



Patent Pending  
Single screen shown

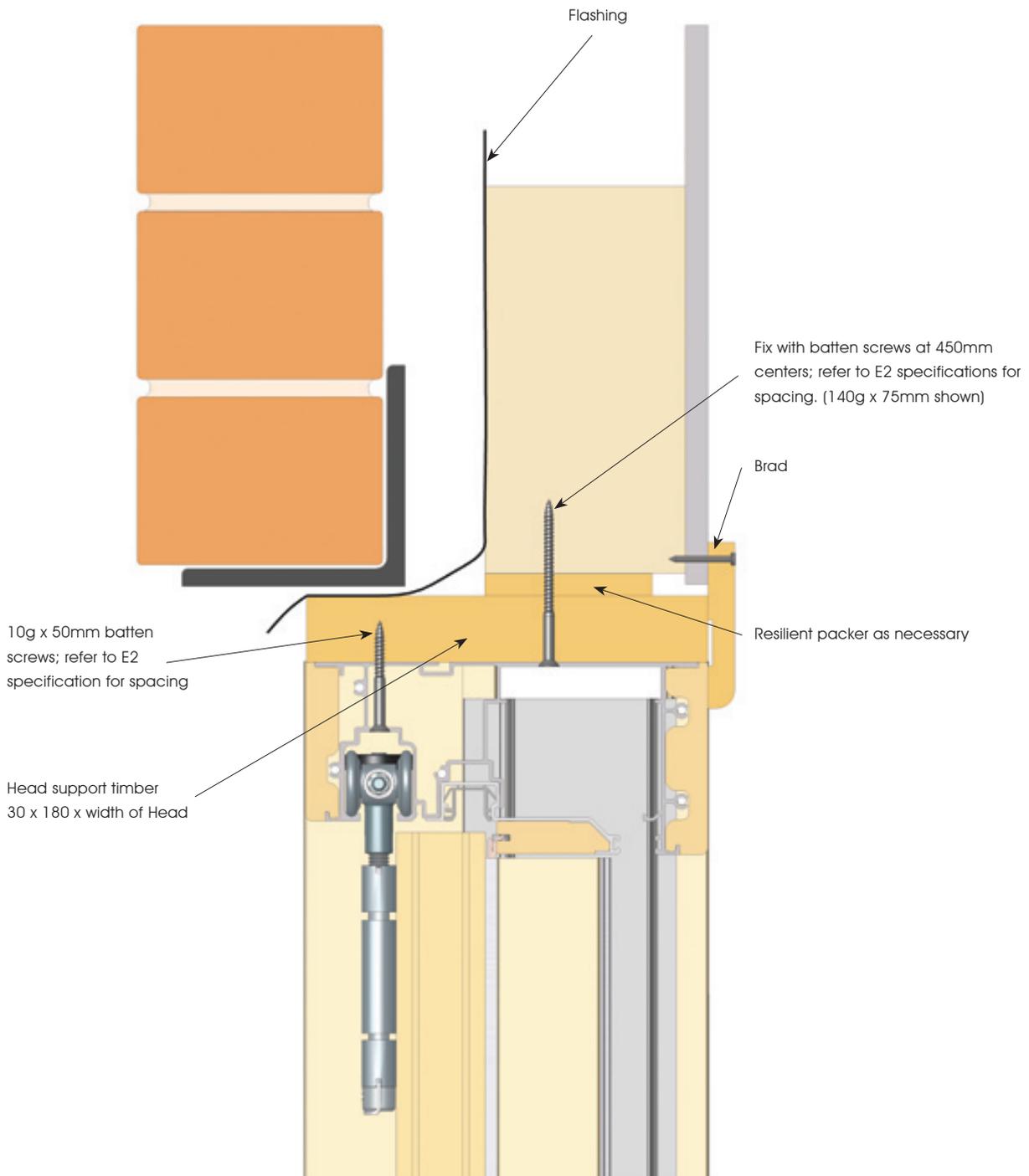
ARCHITECTURAL DETAIL

Brick Veneer Head – Alternate A



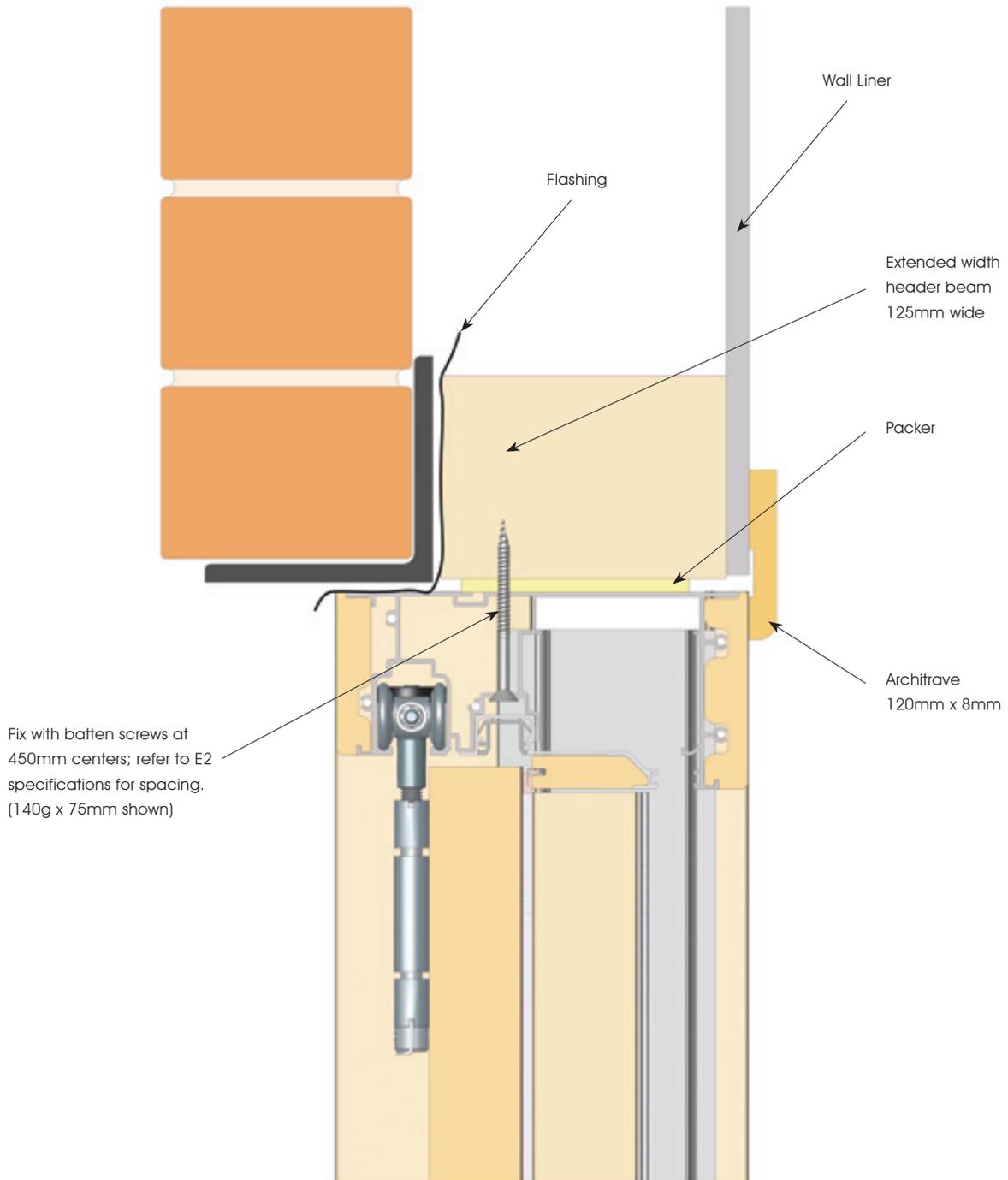
ARCHITECTURAL DETAIL

Brick Veneer Head – Alternate B



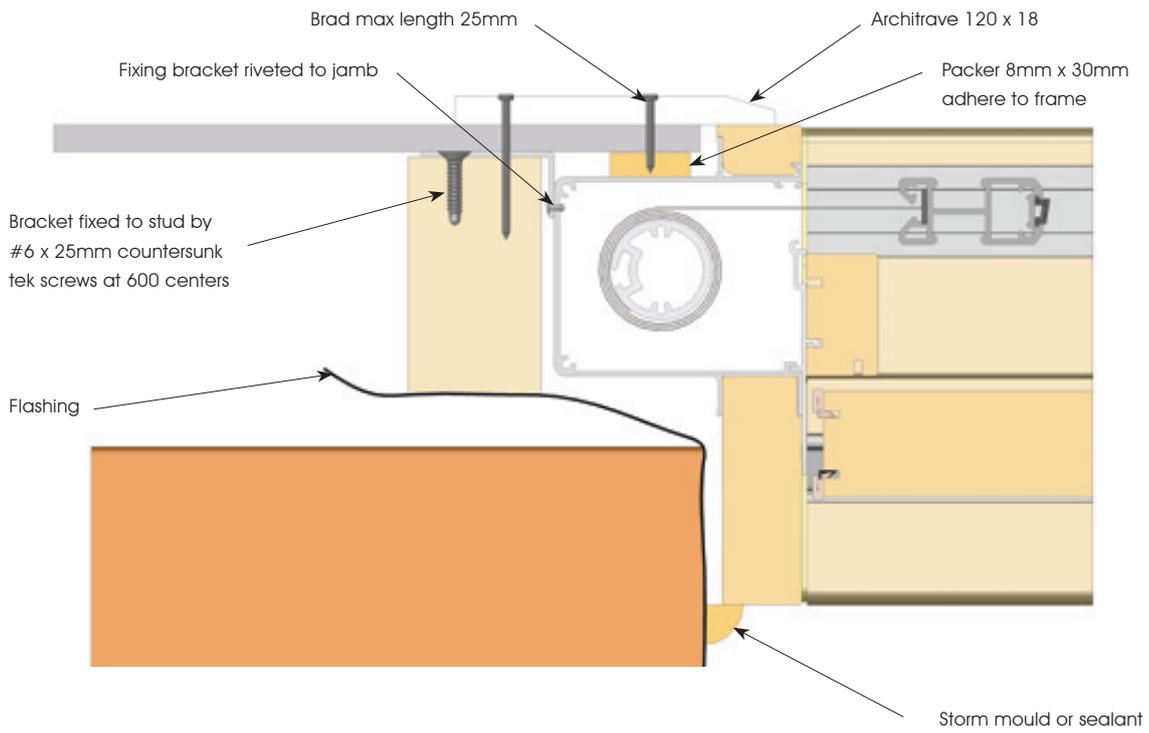
ARCHITECTURAL DETAIL

Brick Veneer Head – Alternate C



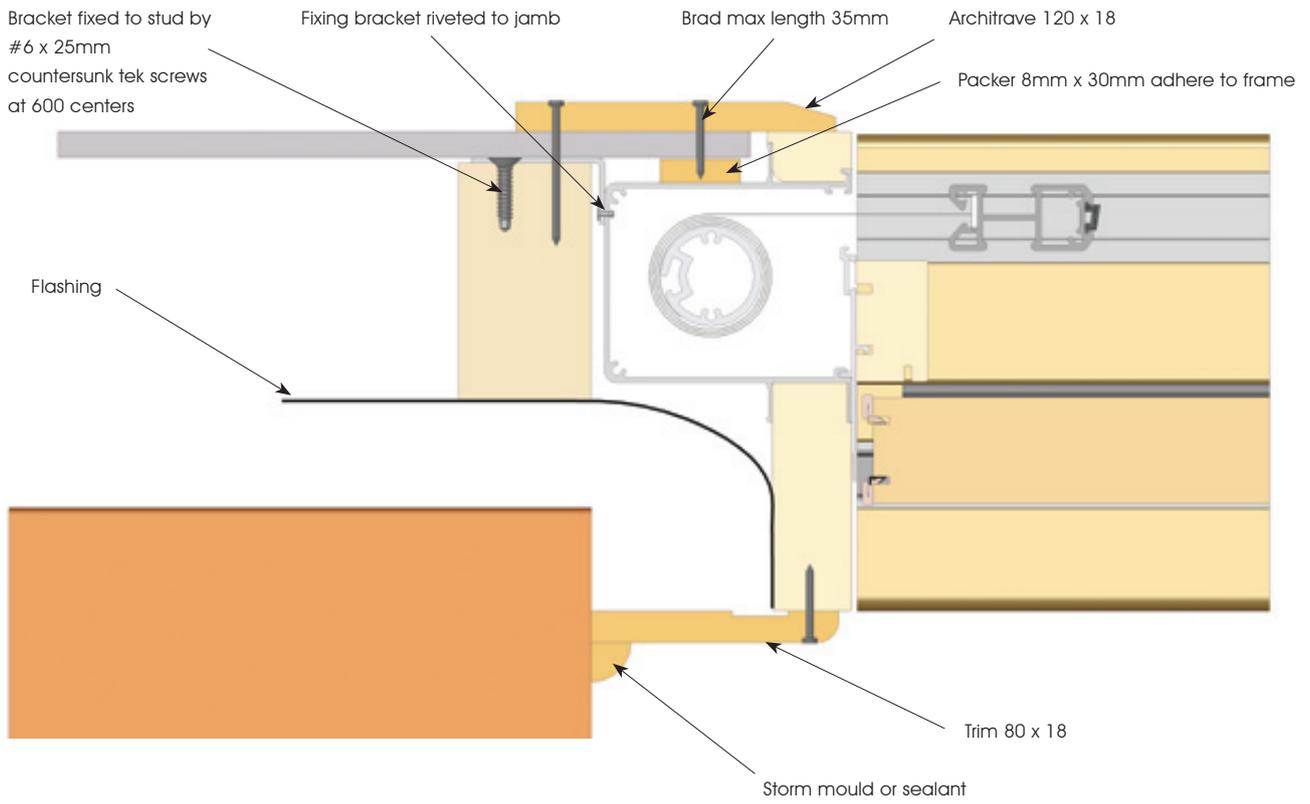
ARCHITECTURAL DETAIL

Brick Veneer Jamb – Option 1



ARCHITECTURAL DETAIL

Brick Veneer Jamb – Option 2



ARCHITECTURAL DETAIL  
Concrete Beam Fixing

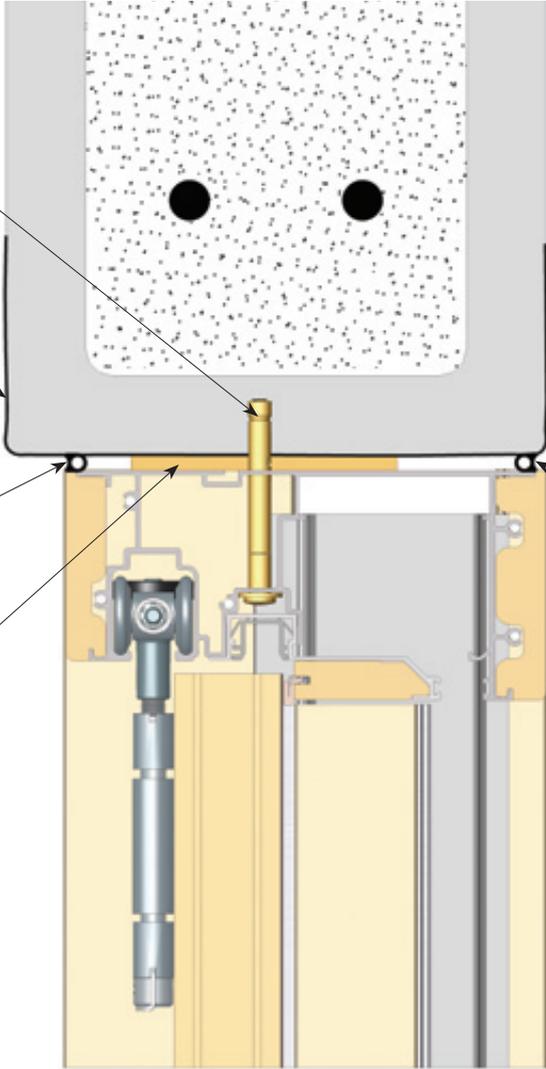
Dynabolt 8mmx75mm  
Refer to E2 specifications  
for spacing

Impervious coating  
applied to surface prior  
to affixing door

Sealant

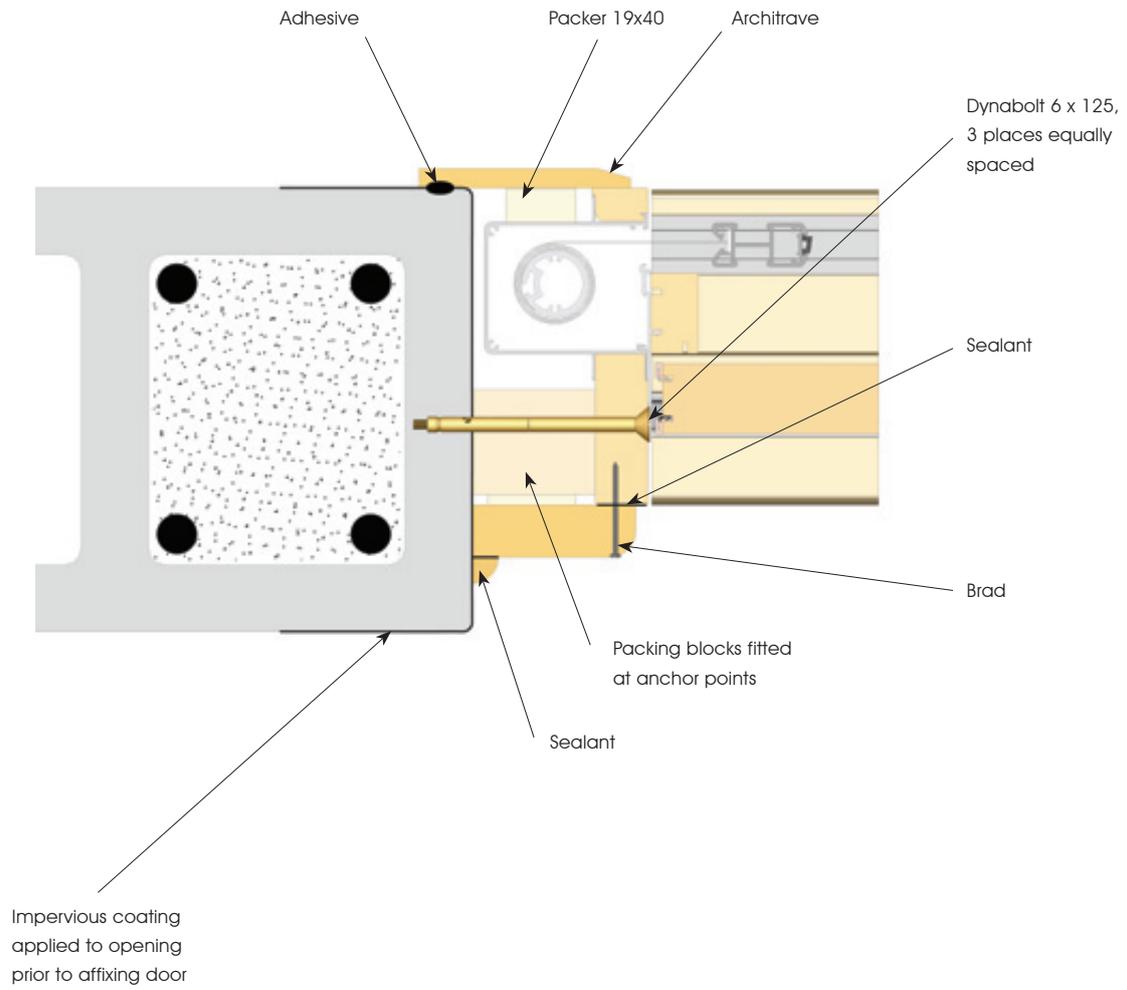
Resilient packer at  
each fixing point

Sealant

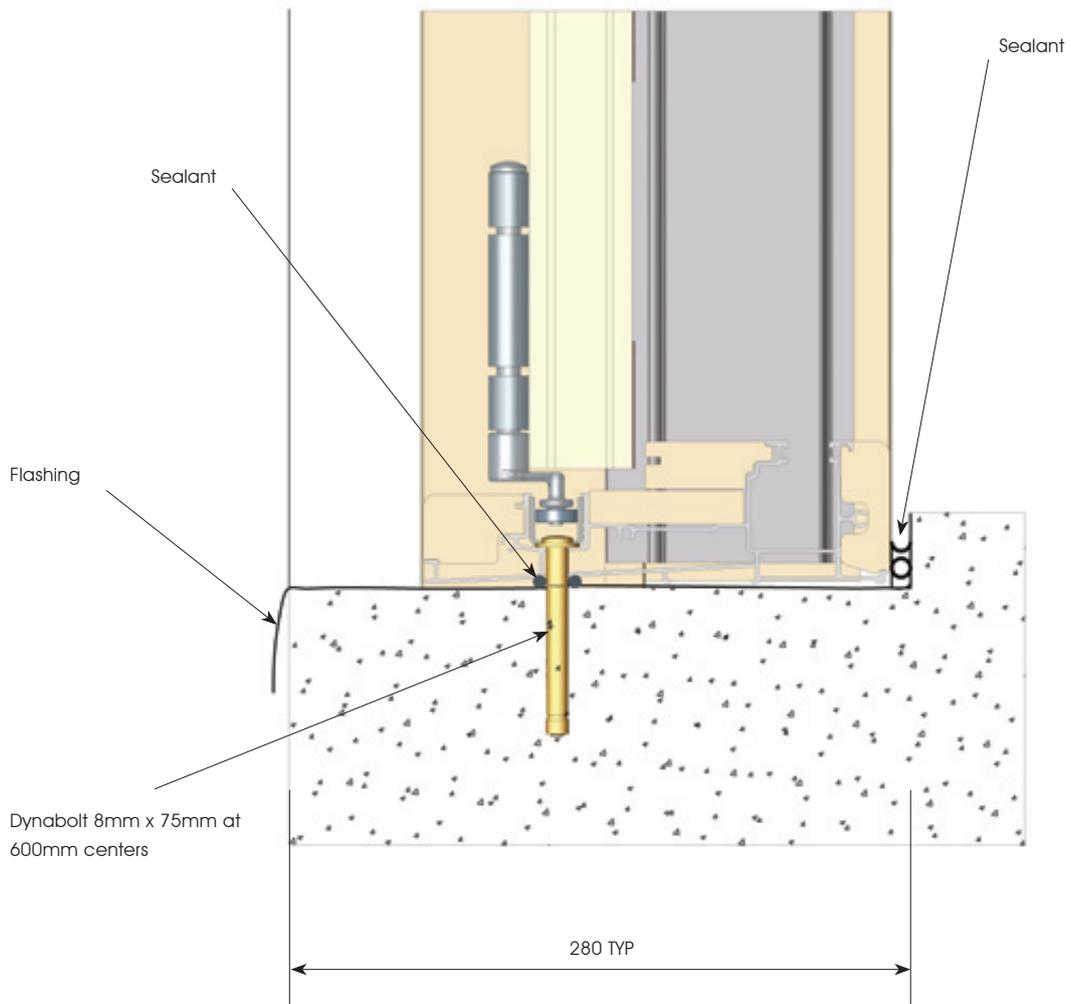


ARCHITECTURAL DETAIL

Concrete Block Jamb Detail

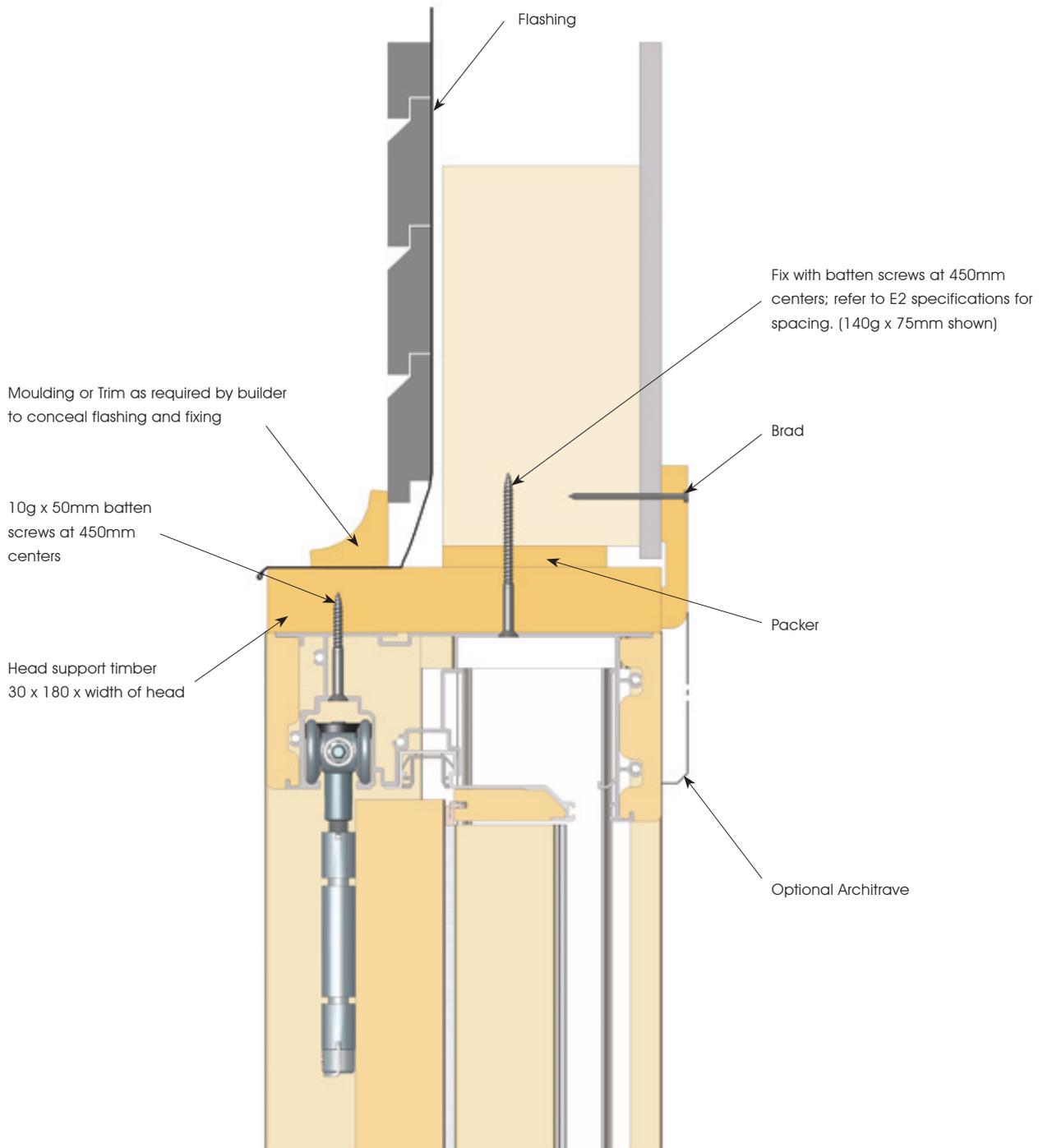


ARCHITECTURAL DETAIL  
Sill Detail Brick Veneer



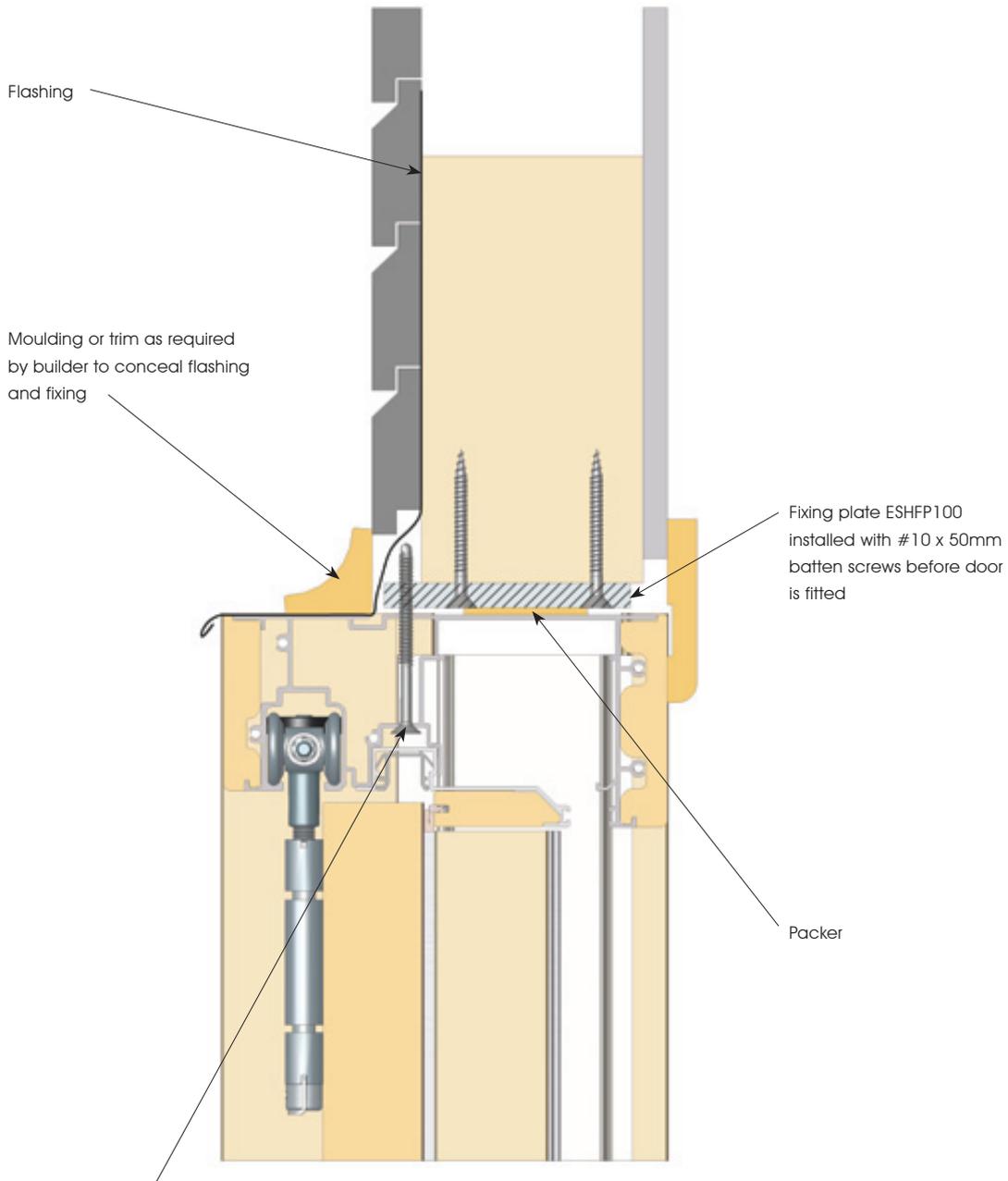
ARCHITECTURAL DETAIL

Timber Clad Head – Alternate A



ARCHITECTURAL DETAIL

Timber Clad Head – Alternate B



Flashing

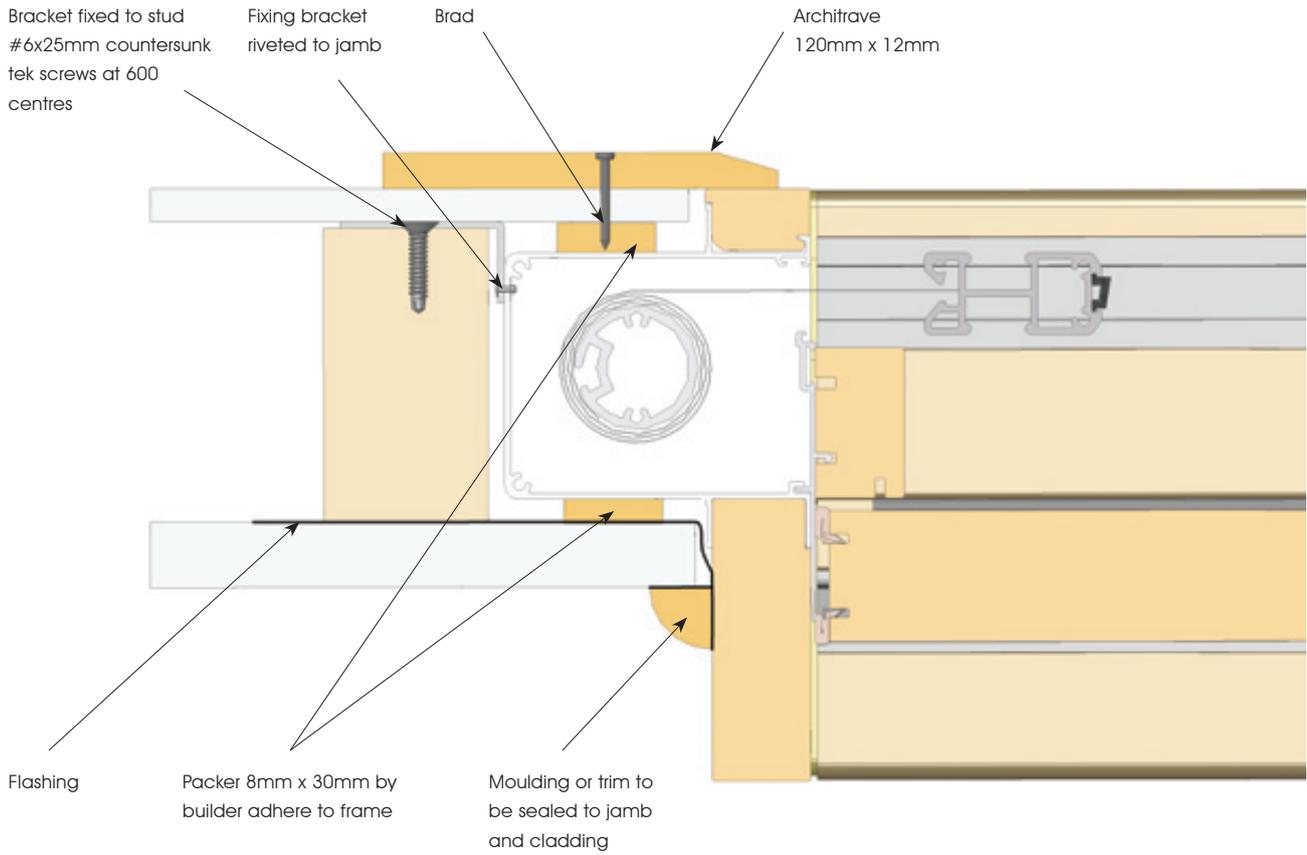
Moulding or trim as required  
by builder to conceal flashing  
and fixing

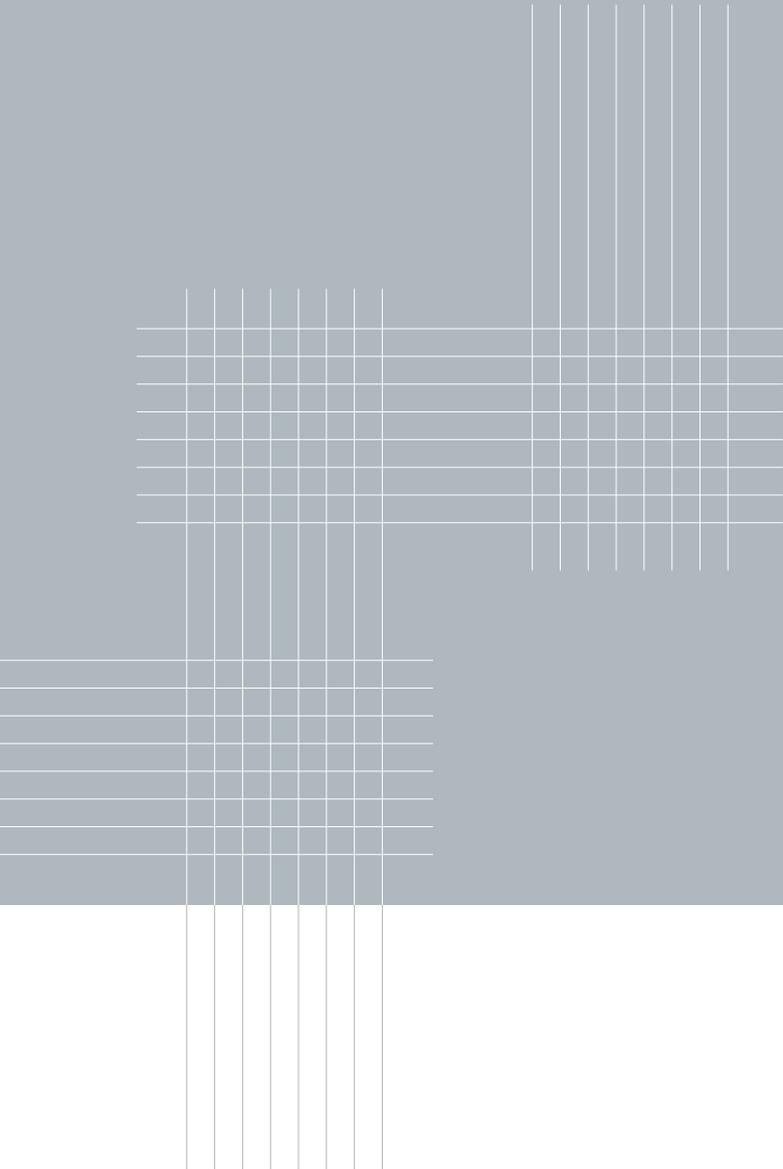
Fixing plate ESHFP100  
installed with #10 x 50mm  
batten screws before door  
is fitted

Packer

Head fixed with 6mm x 75mm  
stainless steel tek screws supplied  
Refer to E2 specifications for spacing

ARCHITECTURAL DETAIL  
Chamfer Board Jamb





While every effort has been made to ensure the accuracy of the information in this publication, Centor Architectural assume no responsibility for errors or omissions or any consequences of reliance solely on this publication.





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**Centor Australia Pty Ltd** | ABN 96 009 716 189

telephone 1300 CENTOR (1300 236 867)  
facsimile 1300 CENFAX (1300 236 329)  
mail@centor.com.au | www.centor.com.au

**BRISBANE**

**Centor Australia Pty Ltd**  
**Head Office & Factory**  
997 Kingsford Smith Drive  
PO Box 1550  
Eagle Farm QLD 4009

**SYDNEY**

**Centor Australia Pty Ltd**  
Unit 1/5 Merryvale Road  
Minto NSW 2566

**MELBOURNE**

**Centor Australia Pty Ltd**  
Suite G03/12 Corporate Drive  
Moorabbin VIC 3189

**ADELAIDE**

**Centor Australia Pty Ltd**  
34 Fullarton Road  
Norwood SA 5067

**PERTH**

**Centor Australia Pty Ltd** Unit  
5b, 151 Herdsman Parade  
Wembley WA 6014

**TASMANIA**

**Launceston**  
**Access Hardware Pty Ltd**  
12 Goodman Court  
Launceston TAS 7248  
telephone +61 3 6324 4900  
facsimile +61 3 6324 4901

**Hobart**

**Access Hardware Pty Ltd**  
21 Brisbane Street  
Hobart TAS 7000  
telephone +61 3 6235 9000  
facsimile +61 3 6235 9001

centor®