INTRODUCTION

This section has been prepared in order to assist architects, designers and builders to understand the basic principles of commercial aluminium framing installation.

One of the great advantages of commercial framing is that it provides architects and designers with a tremendous range of design solutions and features a very flexible and simple fabrication assembly process. In particular most of Lidco's framing systems are designed to be square cut and require minimal end machining.

In general framing systems consist of continuous vertical elements (jambs and mullions) with the horizontal elements (heads, transoms, midrails and sills) fitting between the vertical elements. In cases where the horizontal sections are continuous and the verticals in between, it may be for design reasons or improved weather performance. However, this alternative fabrication method results in limited expansion range and additional machining to the vertical sections. Also when using this method the transportation of the frames to the building site is more difficult.

Aluminium expands and contracts at the rate of approximately 1mm per metre of length and longs runs of commercial framing need to allow for this movement. In particular, where the distance between the mullions exceeds 900mm, expansion mullions are usually chosen and set with a nominal gap of 2mm.

In most cases the framing systems are supplied to site in unglazed modules and then clipped together side by side into their final location. Glazing usually is undertaken when all the framing has been assembled.

SUB-FRAMING

Sub-framing (sub-heads, sub-jambs and sub-sills) is used to simplify installation, improve weather performance and control air infiltration. In particular, sub-heads should be used where there is likely to be vertical movement due to slab deflection or settlement and, when used with sub-sills simplify installation.

SUB-SILLS

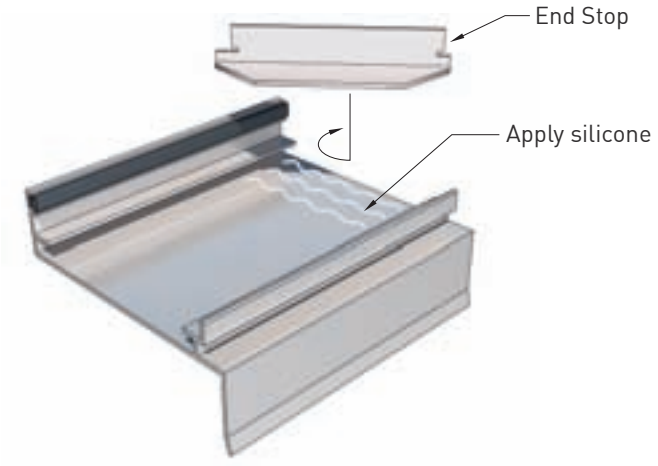
Commercial framing is designed generally to direct water through and underneath the frame. It is not designed to be watertight and the use of slotted sub-sills is key to drainage control.

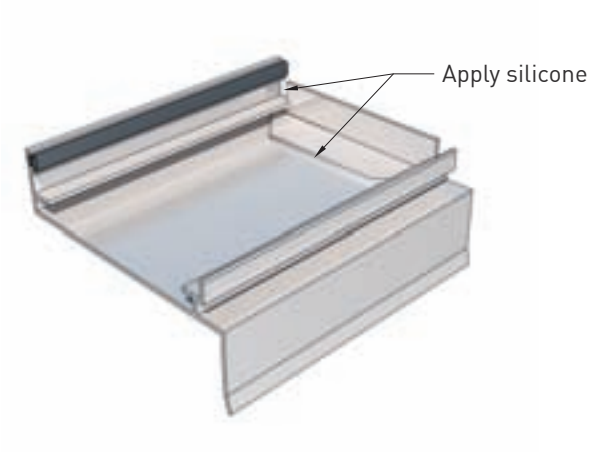
SUB-SILL END CAPS

It is critical that the sub-sills be slotted and an end cap used on sub-sills. Failure to do this will most likely result in water spilling over the ends of the sub-sill and runs underneath the walls.

Sub-Sill Sealing Detail – End Stop

End Stops are required to be installed *BEFORE* fixing sub-sill*





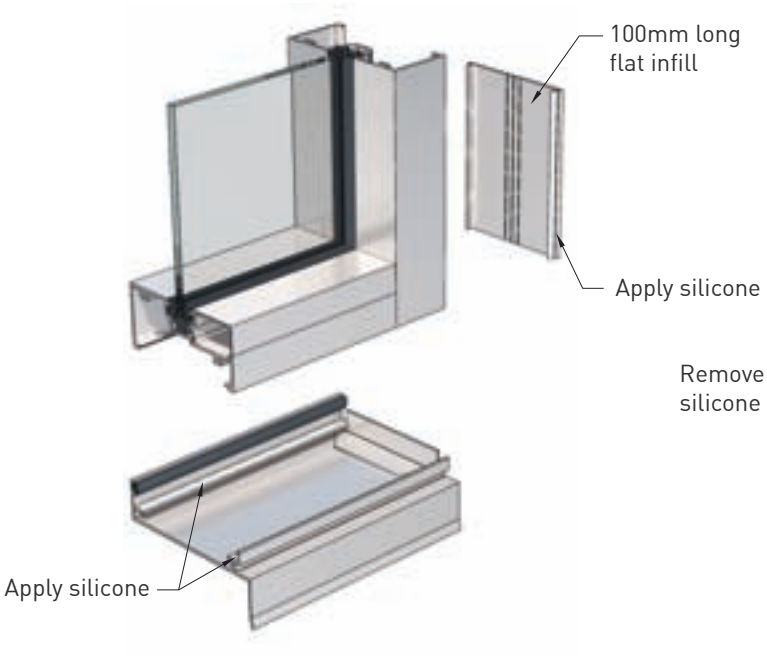
1. Cut angle section and machine according to detail drawings. See next page.

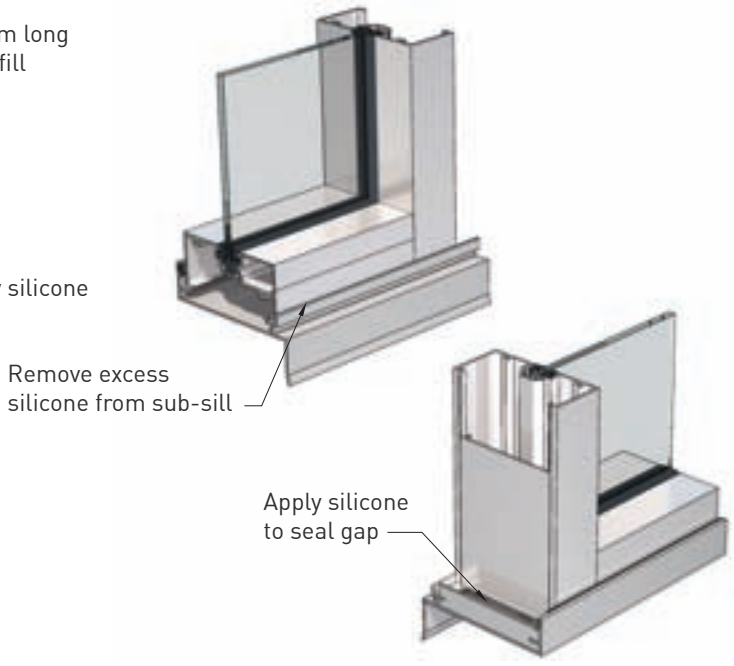
   Run a bead of silicone around the edges of the sub-sill.

2. Apply more silicone sealant to thoroughly seal edges.

   Repeat Step 1 and 2 for other end of sub-sill.

Sealing Frame to Sub-Sill





1. Apply silicone along the full length of the top face of the sub-sill support legs.

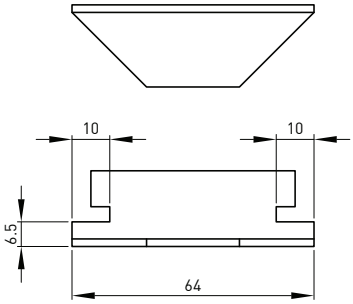
   Apply silicone to 100mm long flat infill edges then snap in flat infill to the bottom of both jambs.

2. After frame installation clean off any excess silicone. Fill gap between angle end stop and frame with silicone at both ends. Remove excess silicone.

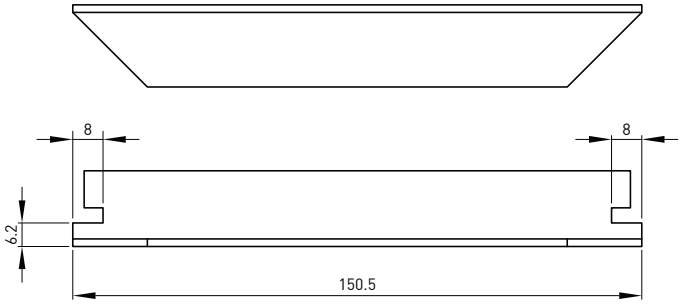
*Please contact Lidco for alternative End Stop installation procedures.

Sub-Sill Sealing Detail – End Stop

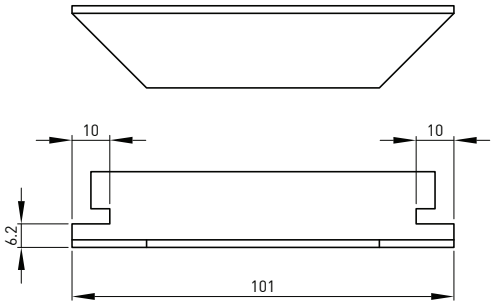
Suitable for 400-312



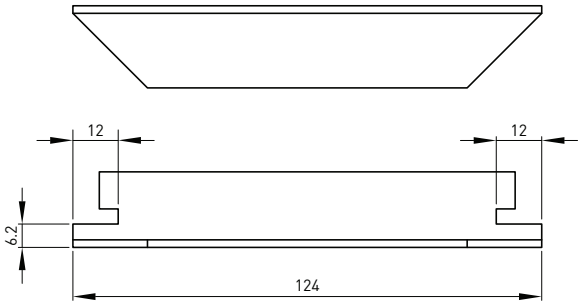
Suitable for 700-247M



Suitable for 700-431 and 700-429

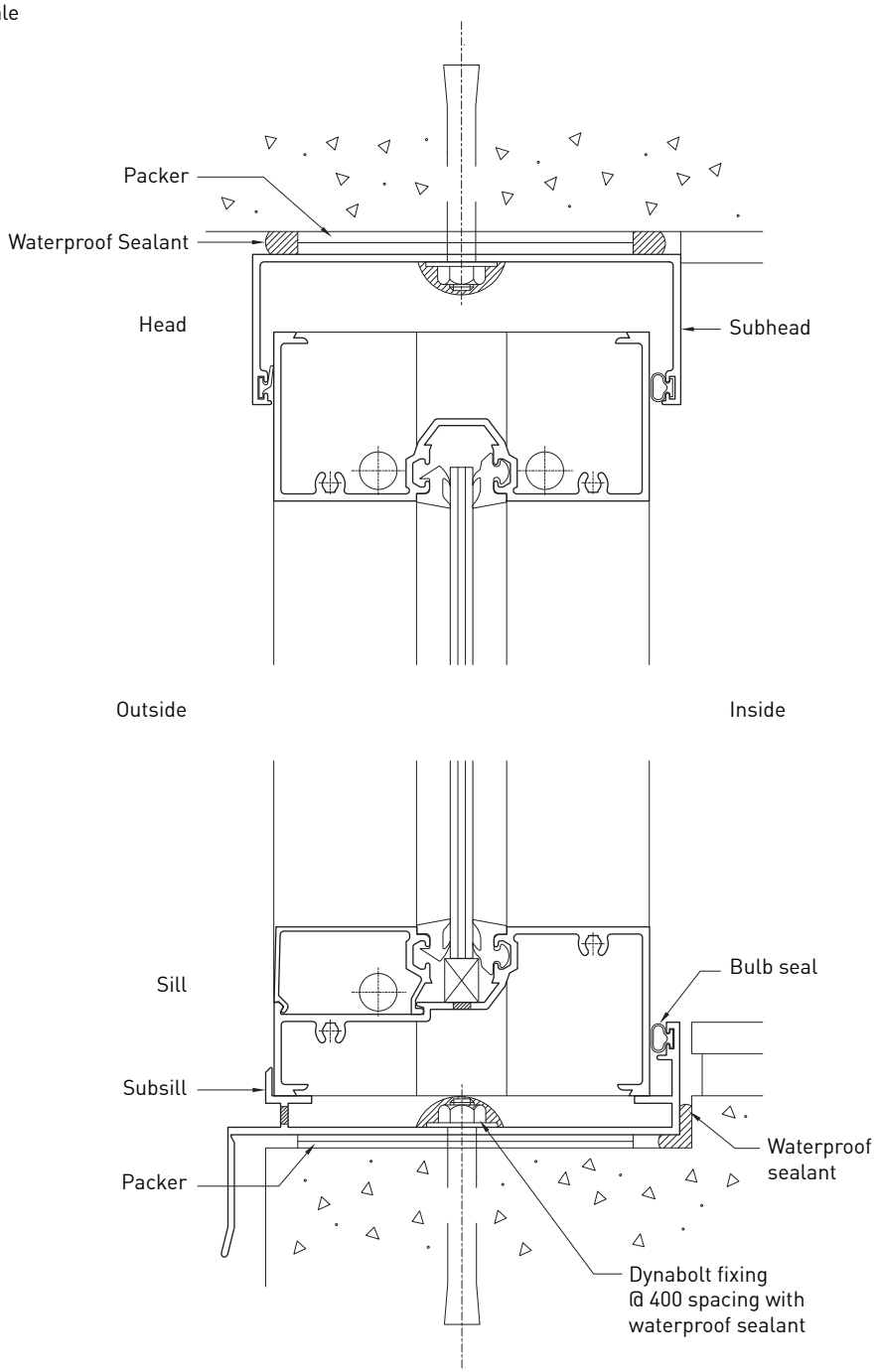


Suitable for 700-247



Typical Commercial Framing Installation

Not to Scale

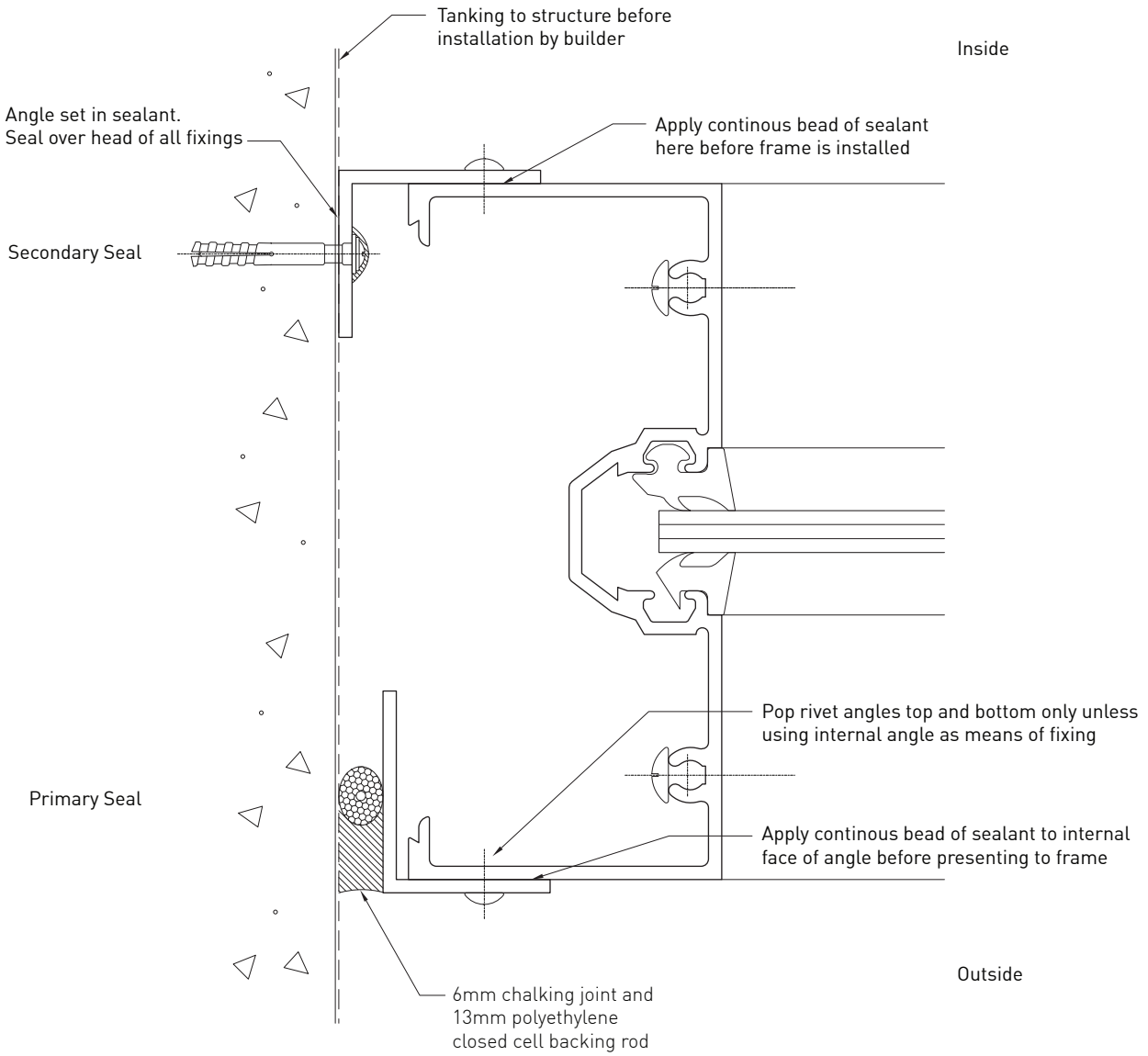


Typical Commercial Framing Installation

Jamb Detail

Option 1

Not to Scale

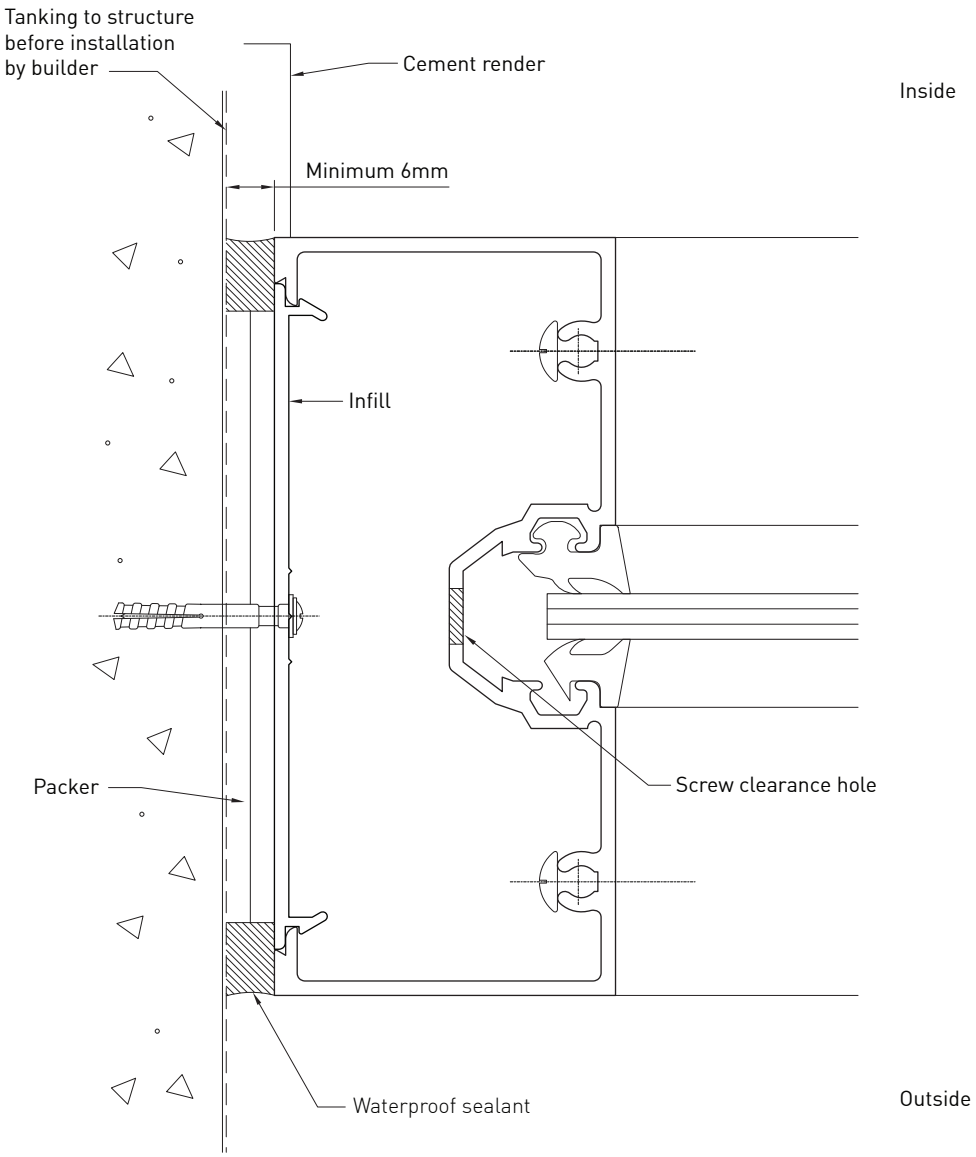


Typical Commercial Framing Installation

Jamb Detail

Option 2

Not to Scale



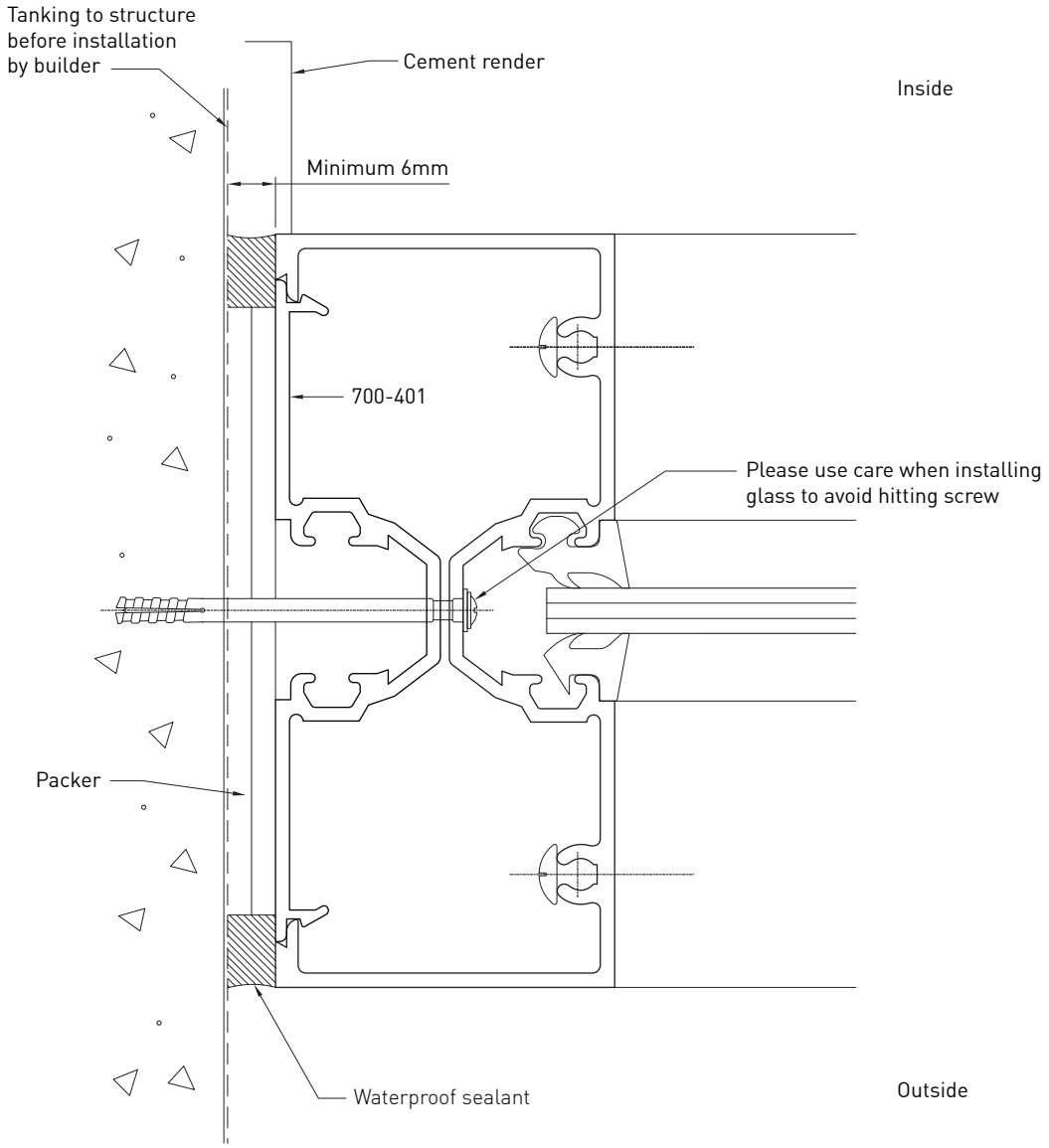
Note: The flat infill is used to fix the jamb directly to the wall through a clearance hole drilled on the main frame pocket. This prevents the screw head from interferring with the glass units.

Typical Commercial Framing Installation

Jamb Detail

Option 3

Not to Scale



REVEAL ADAPTORS

Infill reveal adaptor with nailing fin is suitable for Lidco 100mm framing including 372, 710, 715, 719, 735, 740, 746, 748, and 772 Systems.

Reveal Adaptor Installation

Not to Scale