

Everbright E610 polycarbonate light panels

Installation guidance

Mono-pitched applications:

Eaves

- For pitched roofs above 20-degree fix aluminium angle EL17 to supporting structure with self drilling screws at 180mm maximum centres, or otherwise calculated.
- Lay light panel units into angles and ensure joints are correctly interlocked. Insert plastics locking bars into joints between units.
- Insert profile filler, reference EL136, between underside of light panel units and face of supporting structure.
- When 4 light panel units have been laid, fix first 2 units. Place EL154 clamping washers over 2 of every 3 ribs in material and drill 5.5mm dia hole through material to supporting structure. Fix to timber with 5 x 100mm woodscrews EL56 or to steel structure with self drilling screws EL158.
- Lay 2 further light panel units and repeat procedure.

Verges and abutments

- Place EL154 clamping washers at 600mm centres on final rib in material and drill 5.5mm dia hole through material to supporting structure.
- Fix to timber with 5 x 100mm woodscrews EL56 or to steel structure with self drilling screws EL158.

Intermediate supports

- Thermal movement of the material must be considered when screw fixing to intermediate supports. Generally, 1 of every 6 ribs is fixed.
- If there are 2 or more supports, this fixing interval is staggered, creating a 'diamond' pattern. The fixing incorporates the use of the EL154 clamping washer with the appropriate screw fixing as stated above.

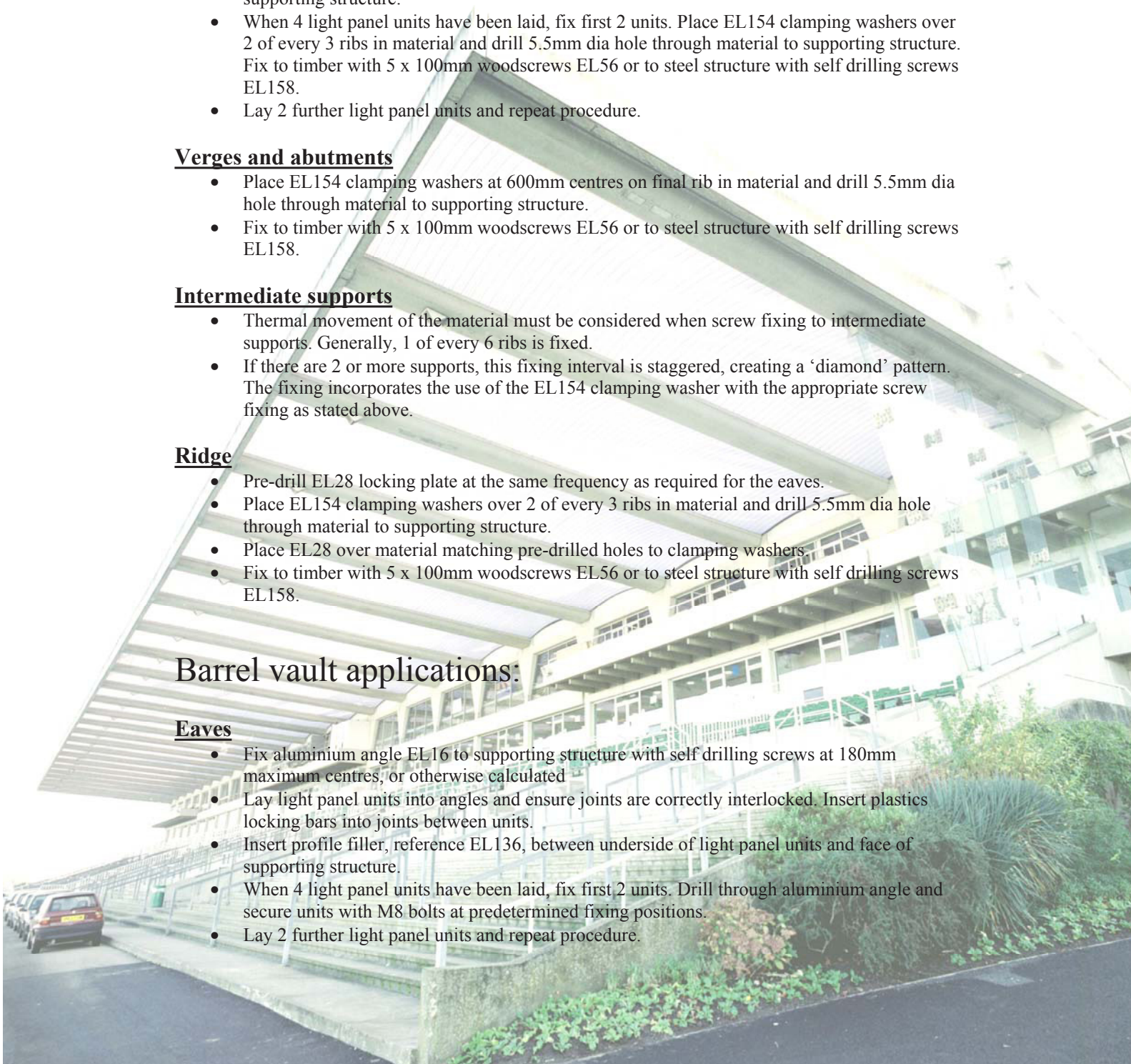
Ridge

- Pre-drill EL28 locking plate at the same frequency as required for the eaves.
- Place EL154 clamping washers over 2 of every 3 ribs in material and drill 5.5mm dia hole through material to supporting structure.
- Place EL28 over material matching pre-drilled holes to clamping washers.
- Fix to timber with 5 x 100mm woodscrews EL56 or to steel structure with self drilling screws EL158.

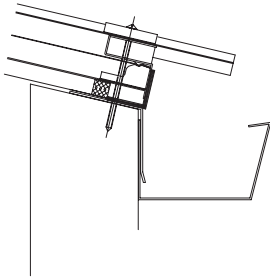
Barrel vault applications:

Eaves

- Fix aluminium angle EL16 to supporting structure with self drilling screws at 180mm maximum centres, or otherwise calculated.
- Lay light panel units into angles and ensure joints are correctly interlocked. Insert plastics locking bars into joints between units.
- Insert profile filler, reference EL136, between underside of light panel units and face of supporting structure.
- When 4 light panel units have been laid, fix first 2 units. Drill through aluminium angle and secure units with M8 bolts at predetermined fixing positions.
- Lay 2 further light panel units and repeat procedure.

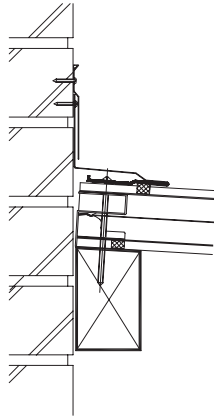


Standard detail 01



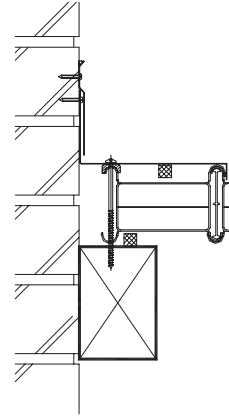
Mono pitched eaves

Standard detail 02



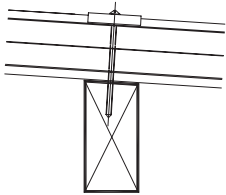
Typical abutment/ridge

Standard detail 03



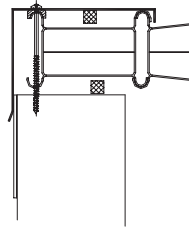
Verge abutment

Standard detail 04



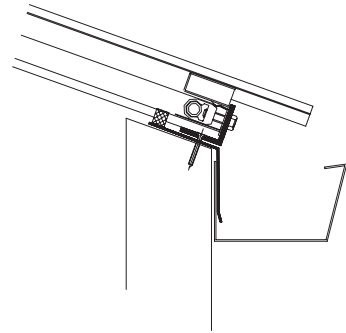
Intermediate support

Standard detail 05



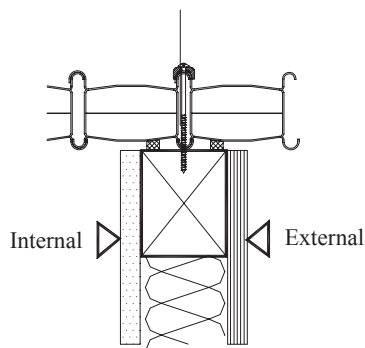
Typical verge

Standard detail 06



Barrel vaulted eaves

Standard detail 07



Flying verge

Ensure min 100mm at all panel junctions. Screw fix end of lower panels through EL28 and clamping washer EL154 into purlin with EL158 S/D screws @ 300mm cts. Seal with foam filler EL136 inside and EL135 outside and clip upstand flashing EL19 over EL28.

At eaves of upper panel fix eaves angle EL41 to purlin and over upstand flashing EL19. Screw fix upper panel through clamping washer EL154 to purlin with EL158 S/D screws @ 300mm cts. Seal with foam filler EL136

Profile EL135

Profile filler EL136

Screw fix cover flashing EL20 through self adhesive compressible foam tape to abutment wall @ 450mm cts.

Seal joint between wall and flashing with mastic sealant by others

Fit upstand flashing EL19 over ali. locking plate EL28 and screw fix to abutment wall @ 450mm cts.

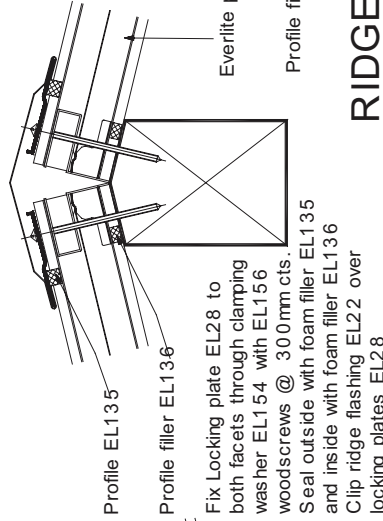
Profile EL135

Profile filler EL136

Screw fix Everlite to SW wallplate through EL28 & clamping washer EL154 with EL156 woodscrews @ 300mm cts.

ABUTMENT

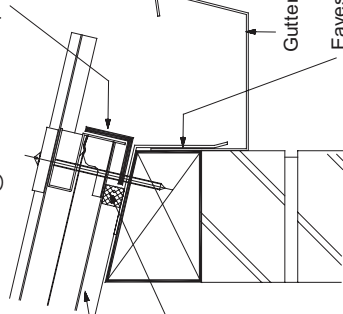
FIXING TO TIMBER



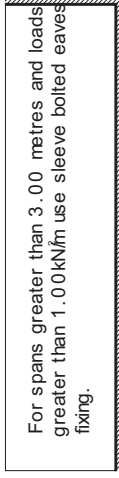
RIDGE

Fix Locking plate EL28 to both facets through clamping washer EL154 with EL156 woodscrews @ 300mm cts. Seal outside with foam filler EL135 and inside with foam filler EL136. Clip ridge flashing EL22 over locking plates EL28

Fix eaves flashing EL41 to timber wallplate. Screw fix Everlite to wallplate through clamping washer EL154 with EL156 woodscrews @ 300mm cts. for pitches greater than 10°

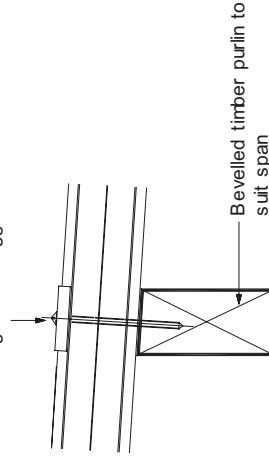


EAVES



STEPPED PURLIN

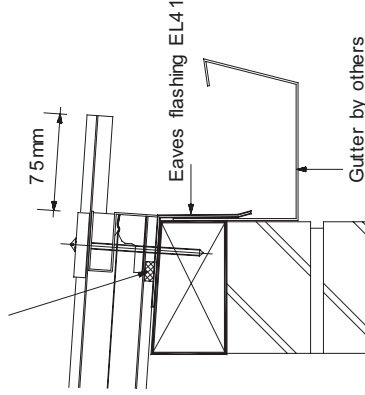
Fix Everlite to timber purlins through clamping washer EL154 with EL156 woodscrews @ 600mm cts. When fixing to multiple purlins ensure fixings are staggered 300mm



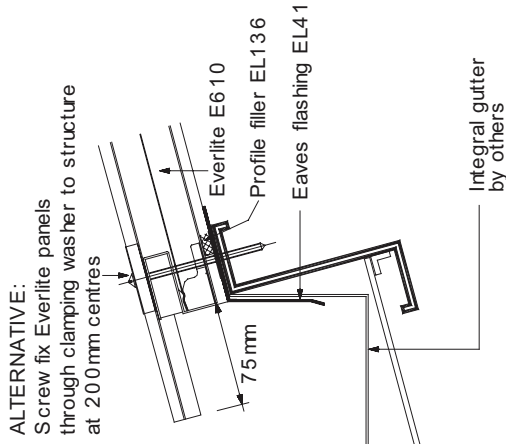
PURLIN

Fix eaves flashing EL41 to timber wallplate. Screw fix Everlite to wallplate through clamping washer EL154 with EL156 woodscrews @ 300mm cts.

Profile filler EL136



EAVES



ALTERNATIVE:
Screw fix Everlite panels through clamping washer to structure at 200mm centres

Rake out mortar joint and install cover flashing EL18 and repoint with mortar
Fit upstand flashing EL19 over locking plate EL28 and screw fix to abutment wall at 450mm centres

Screw fix Everlite to steel angle through locking plate EL28 and clamping washer EL154 with EL158 self drilling screws at 300mm centres
Profile filler EL135

Profile filler EL136
Screw or bolt steel angle to wall at regular centres
Screw fix eaves angle EL16 to structure at 200mm max centres with screws by others

Profile filler EL136
Screw fix Everlite to steel support through locking plate EL28 and clamping washer EL154 with EL158 self drilling screws at 300mm centres

Drill eaves angle EL16 and fix M8x25 bolts EL26 into aluminium sleeves EL24 at 300mm centres
Modified eaves flashing EL41

Fit modified upstand flashing EL19 over locking plate EL28
Profile filler EL135

Screw fix Everlite to steel support through locking plate EL28 and clamping washer EL154 with EL158 self drilling screws at 300mm centres

Fit flashing modified EL19 over locking plate EL28
Screw fix Everlite to steel angle through locking plate EL28 and clamping washer EL154 with EL158 self drilling screws at 300mm centres
Profile filler EL135
Steel purlin

Profile filler EL136
Steel purlin

SECRET EAVES

For spans greater than 3.00 metres and loads greater than 1.00kN/m use sleeve bolted eaves fixing.

Curved or pitched Everlite E610

Screw fix eaves angle EL16 to structure at 200mm max centres with screws by others

Drill eaves angle EL16 and fix M8x25 bolts EL26 into aluminium sleeves EL24 at 300mm centres

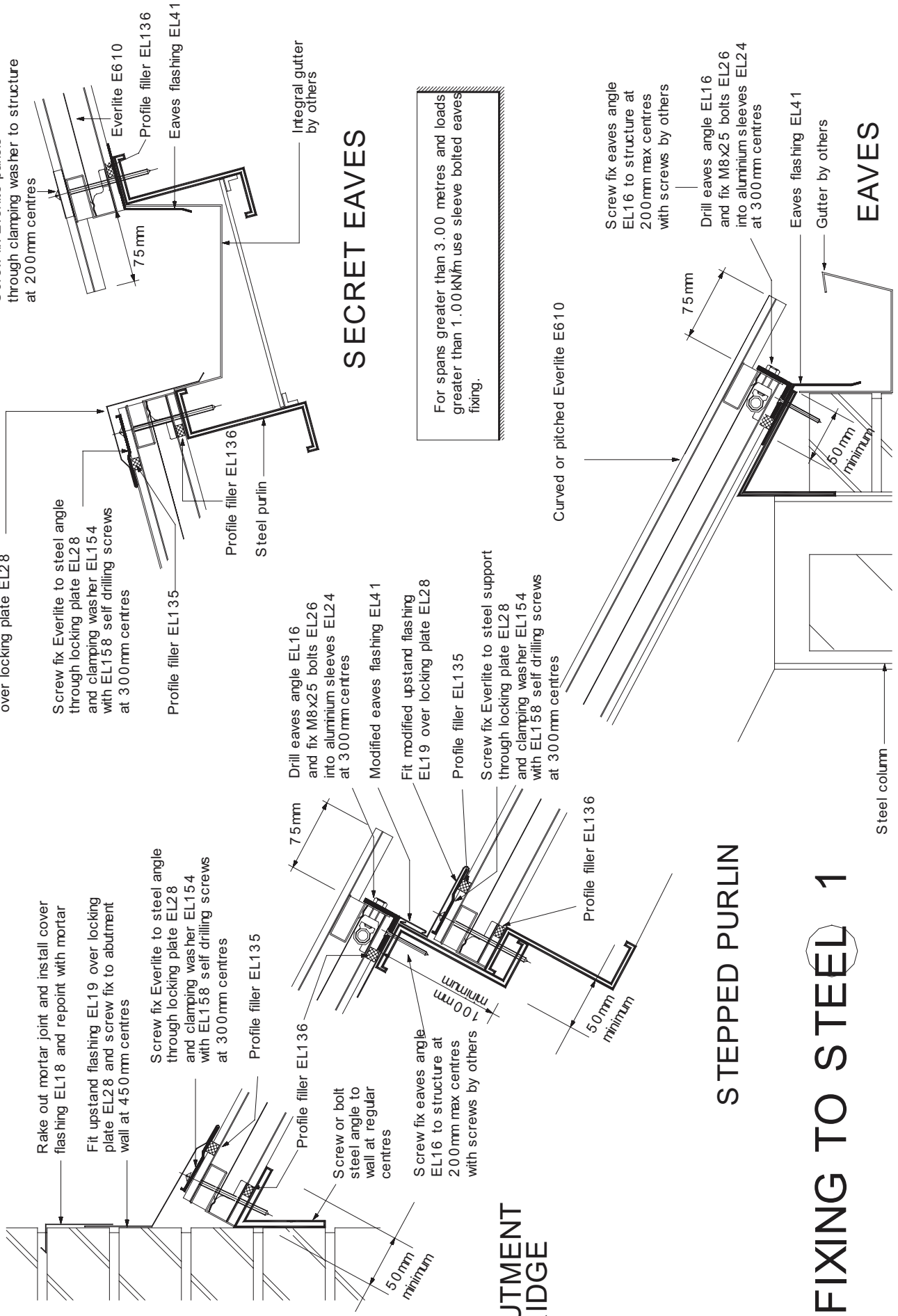
Eaves flashing EL41
Gutter by others

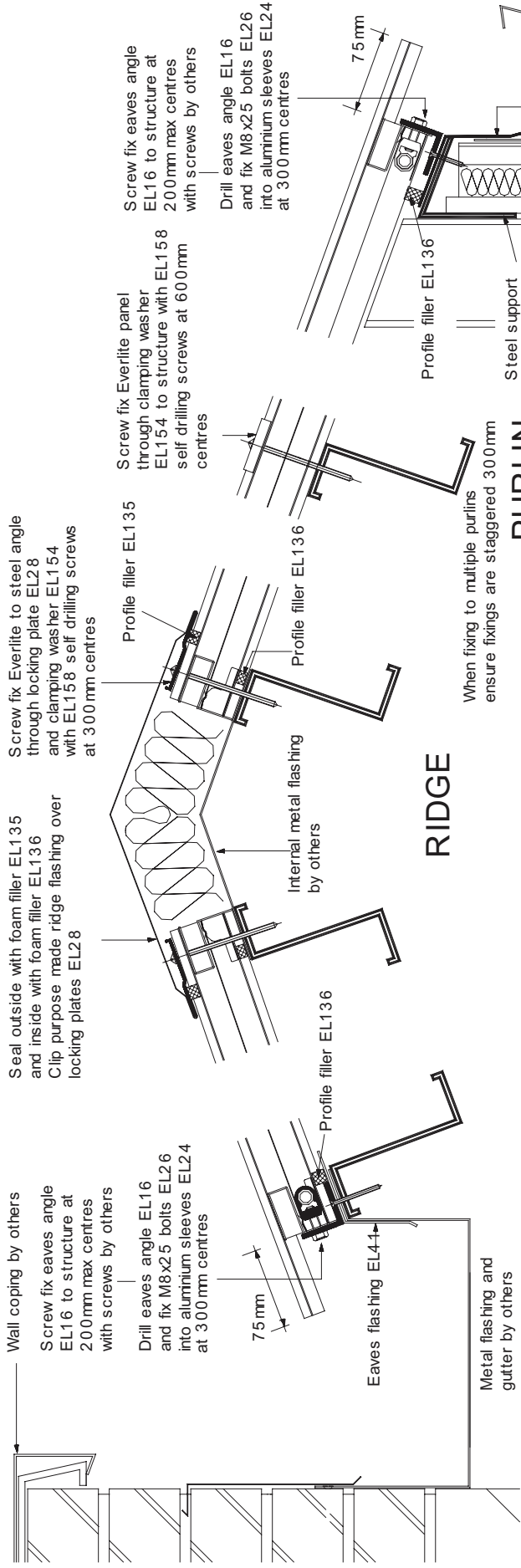
EAVES

Steel column

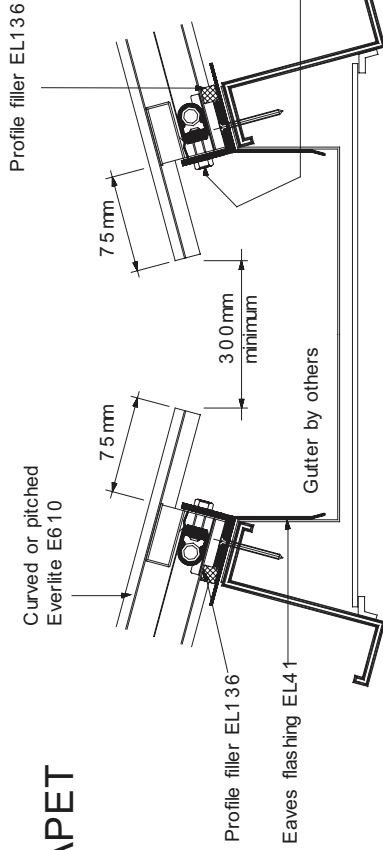
STEPPED PURLIN

FIXING TO STEEL 1

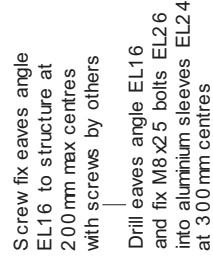




PARAPET



VALLEY



EAVES

For spans greater than 3.00 metres and loads greater than 1.00kN/m use sleeve bolted eaves fixing.

FIXING TO STEEL 2