

# Temporary Group Presentation

Awaiting Group:

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PROJECT: STUDENT HALL OF  
RESIDENCE IN CONSTANCE  
TECH TUT  
SCALE 1:10 AXONOMETRIC  
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### 1. Window Construction

Glass in silicone  
Glass fitted to pine sub-frame, machined to fit into window main frame (sliding window)  
120/50mm window sill on 80/40mm window trimmer, nailed to 100/100 vertical frame stud  
Galvanized steel profile rainwater drip screwed to main window frame

### 3. Wall Construction

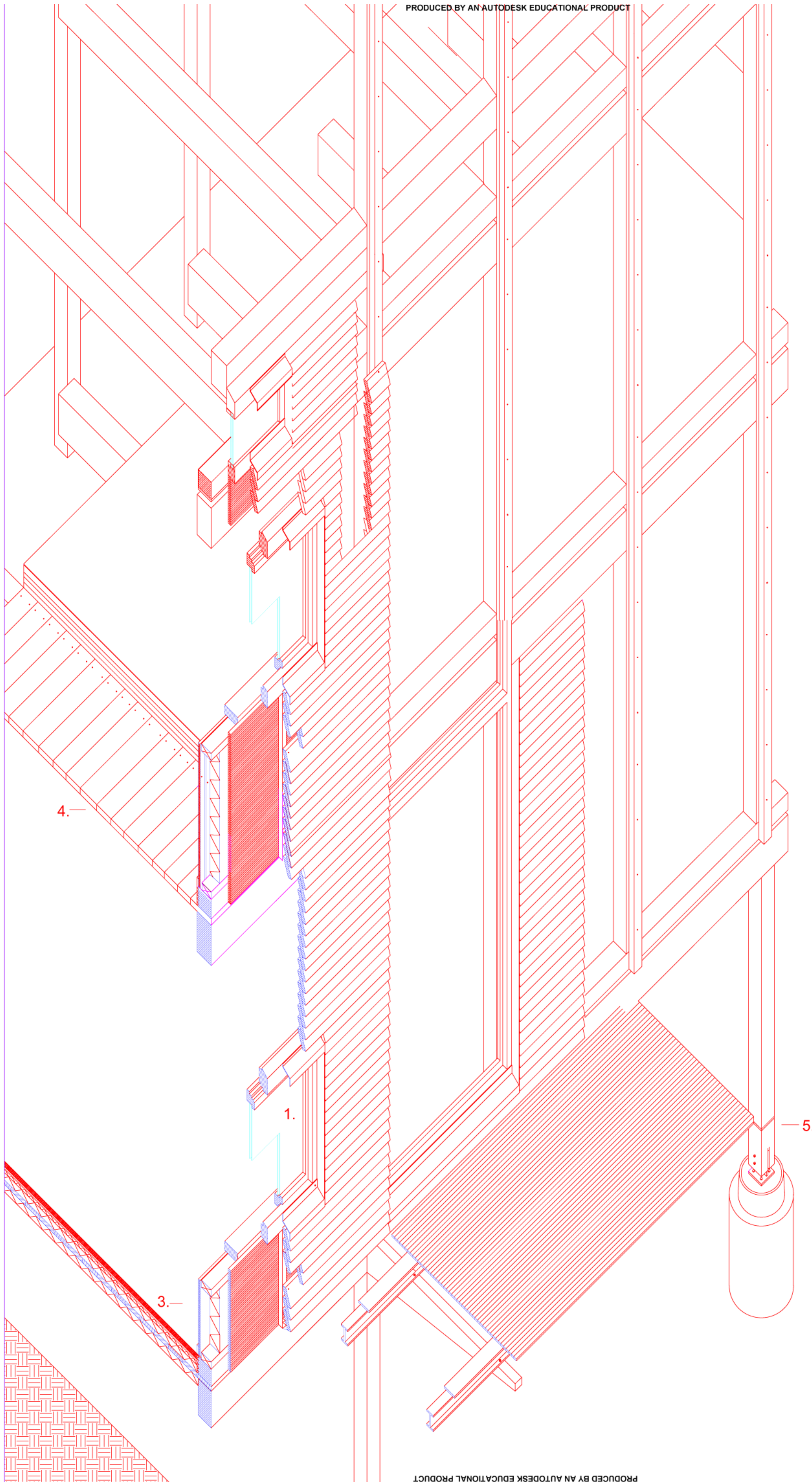
100/100mm frame columns exposed internally at 3m centres  
12mm plasterboard nailed on 40/107mm timber frame  
100mm thermal insulation bituminous soft board  
24mm rough pine weather nailed on 40mm/60mm boarding battens with timber fillers under the lowest boarding batten

### 4. Floor Construction

3mm synthetic rubber  
40mm cement screed  
0.22mm polyethylene foil  
25mm footstep insulation  
30mm particle board  
30mm(acoustic) gravel layer under living rooms  
25mm T&G boarding nailed to main beam  
210/120mm main beam attached to 100/100 main column with galvanized gusset plate (similar to structural steel work) with (25-38mm) screw

### 5. Column Construction

100/100mm support column bolted with 2 x 10mm stud bolt  
Columns exposed on the inside and painted white



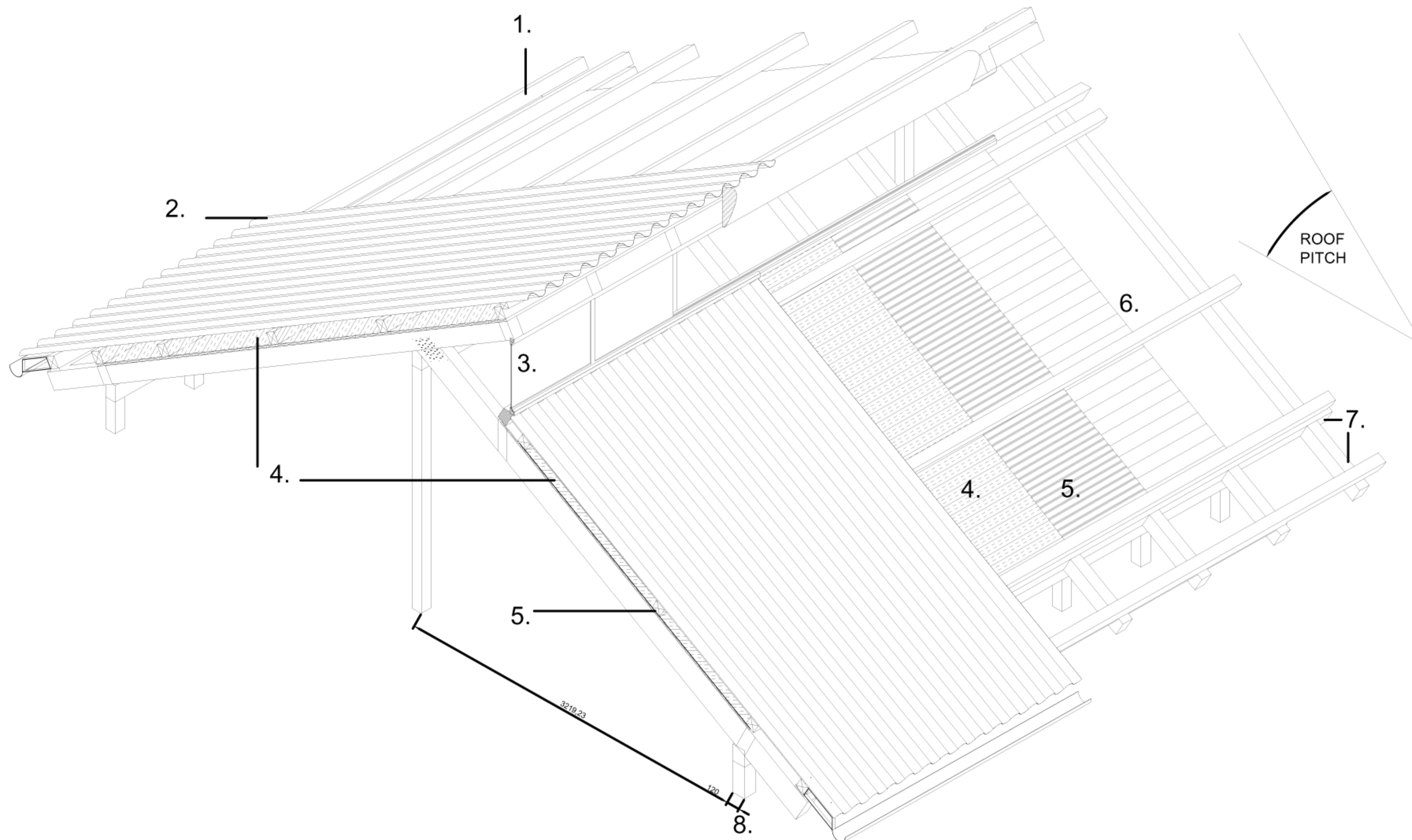
PROJECT: STUDENT HALL OF  
RESIDENCE IN CONSTANCE

TUTORIAL 3  
STEVAN TSENG  
KURT HESSE

REFERENCES:  
DETAIL 1994 JUN-SEPT ISSUE  
A TECHNICAL GUIDE TO GOOD  
HOUSE CONSTRUCTION P123

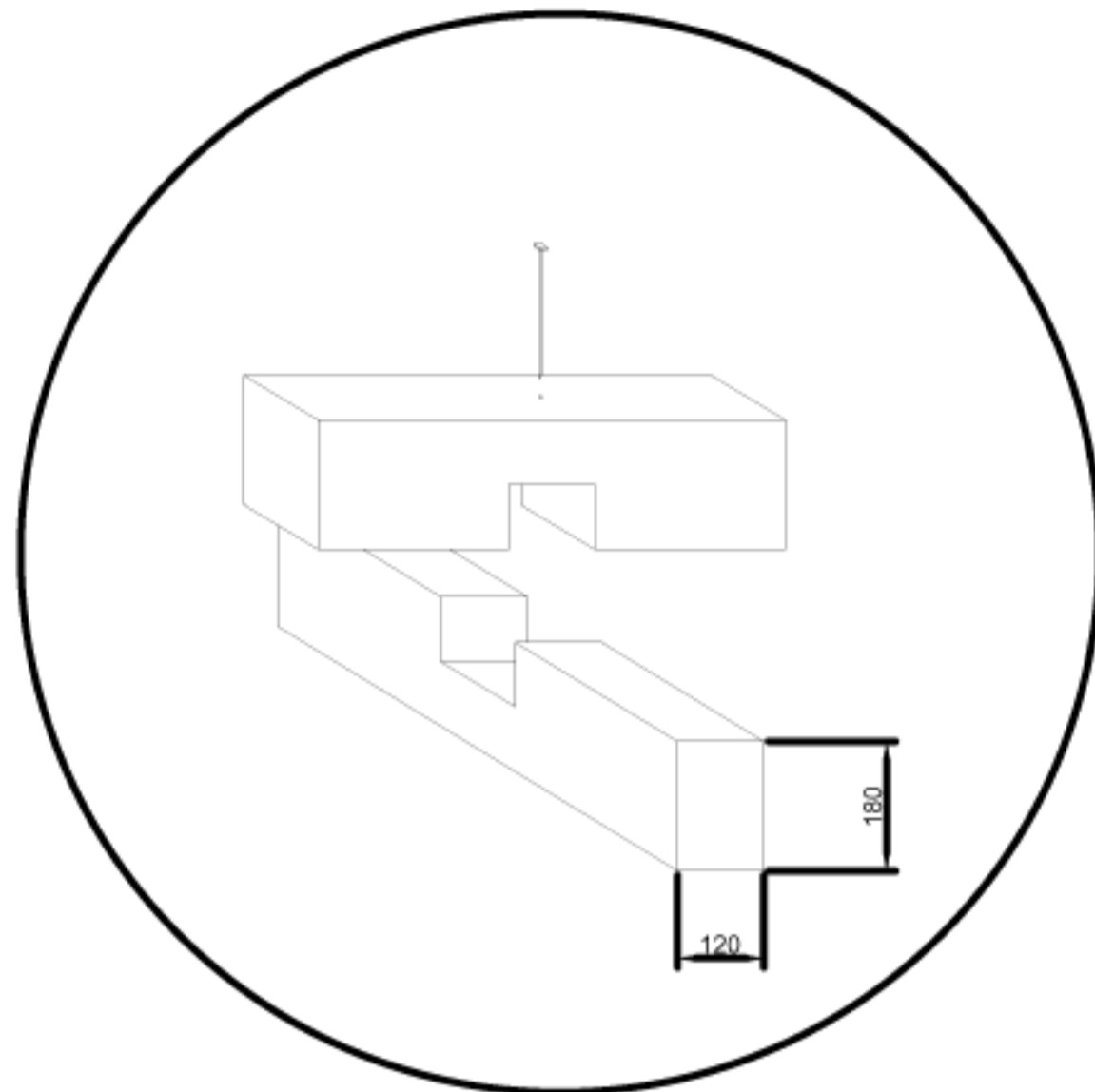
ANNOTATIONS

- 1. 120mm x 110mm  
timber purlins  
sits atop vapour barrier  
Note: large cross-sectional  
area compensates for its large  
spacing (> 1400mm)
- 2. 1.2 mm thick  
corrugated aluminium sheeting  
nailed to purlins
- 3. 6 mm thick  
glass of clerestory windows  
sits within frame attached to  
rafter
- 4. 120mm thick  
thermal insulation  
sits between roof sheeting and  
ceiling boards
- 5. 0.4mm thick  
polyethylene vapour barrier  
sits between purlins and ceiling  
boards
- 6. 25 mm thick  
timber T&G boarding  
ceiling boards sit atop rafters
- 7. 120mm x 180mm  
timber rafters  
rests on wall plate which  
rests on columns
- 8. 120mm x 120mm  
timber columns  
forms the primary structure



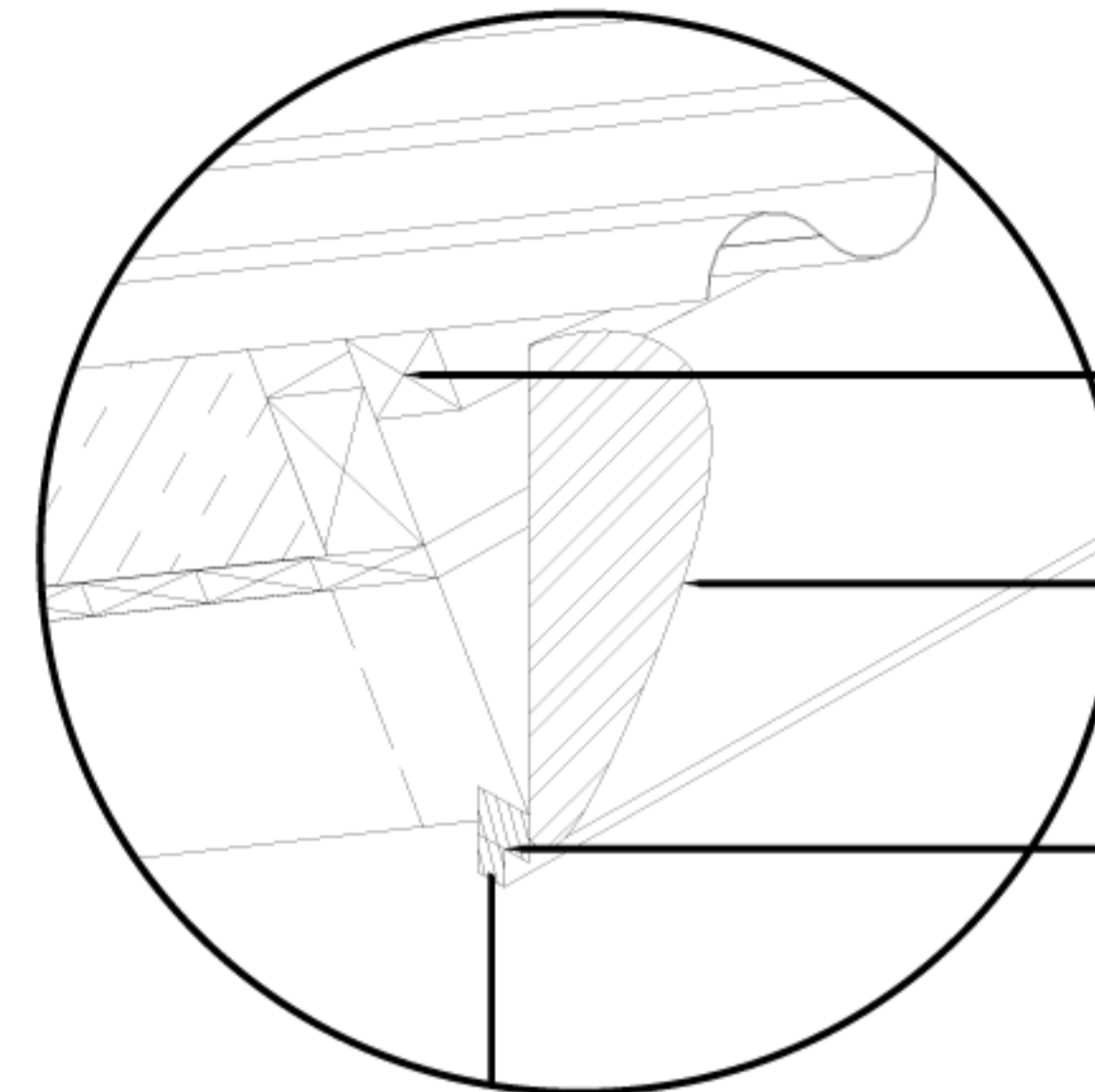
1:20 Sectional perspective of roof structure

1:10 Detail 1



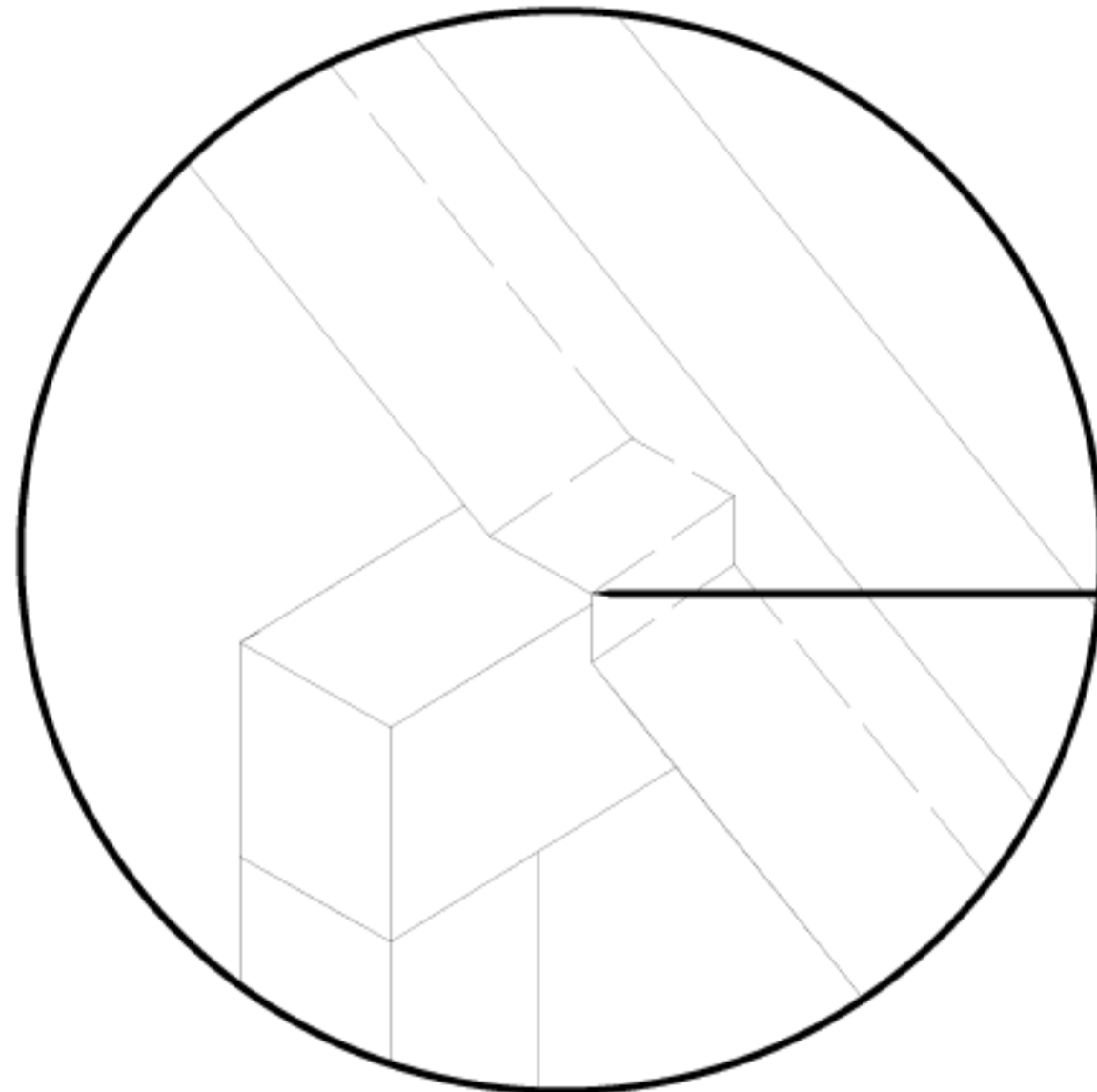
Orthogonal rafter connection.  
120mm wide cut to a depth of half its height (180mm).  
Rafters then fit into each other at right angles. Nailed in for security.

1:5 Detail 4



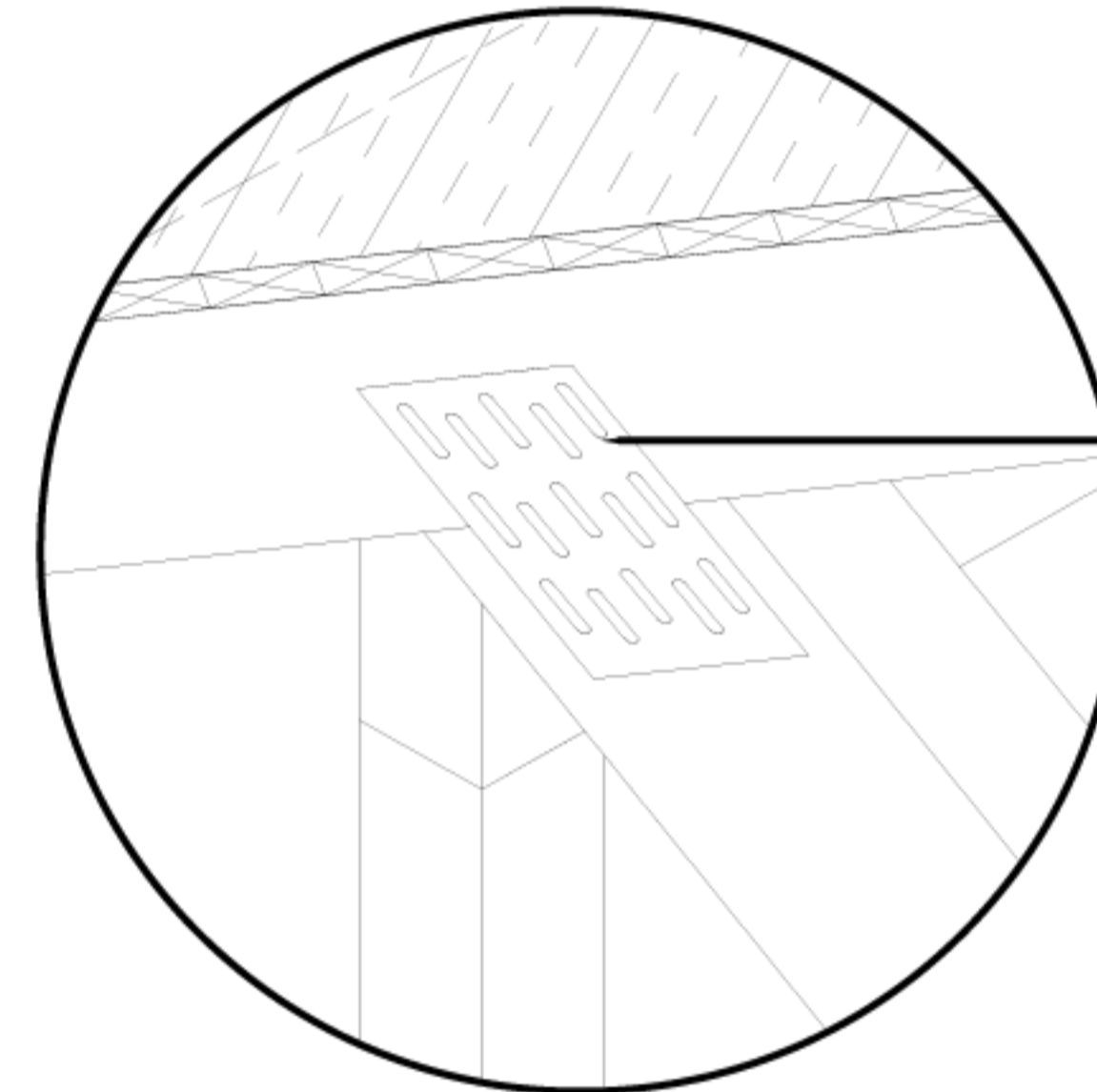
Timber filler member  
Sits against purlin  
Metal cover piece  
Used to protect internal roof elements  
Clerestory window frame

1:5 Detail 2



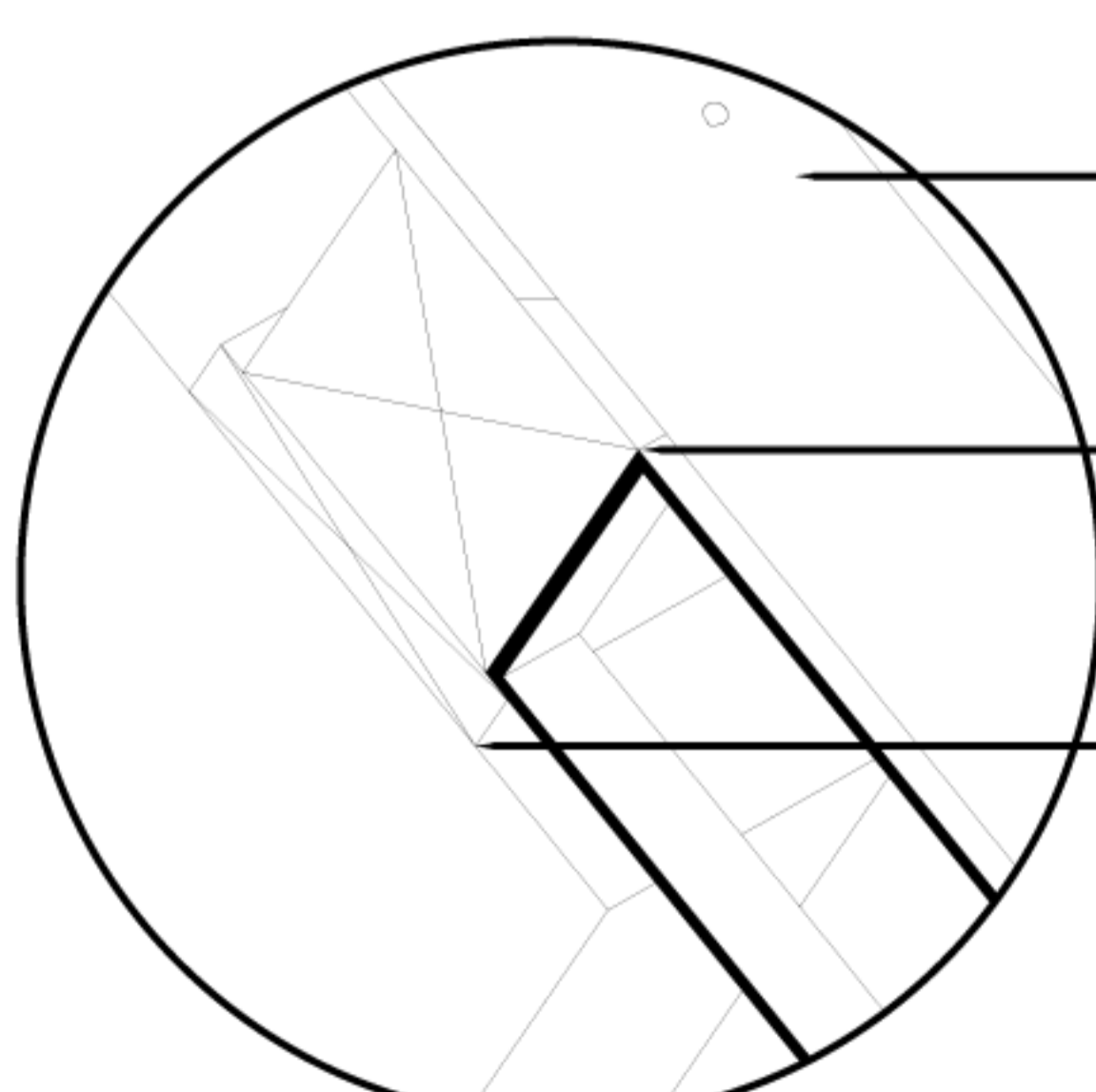
Birdsmouth cut along the rafters.  
This cut sits on the timber wall plate.  
Allows for security against movement.

1:10 Detail 5



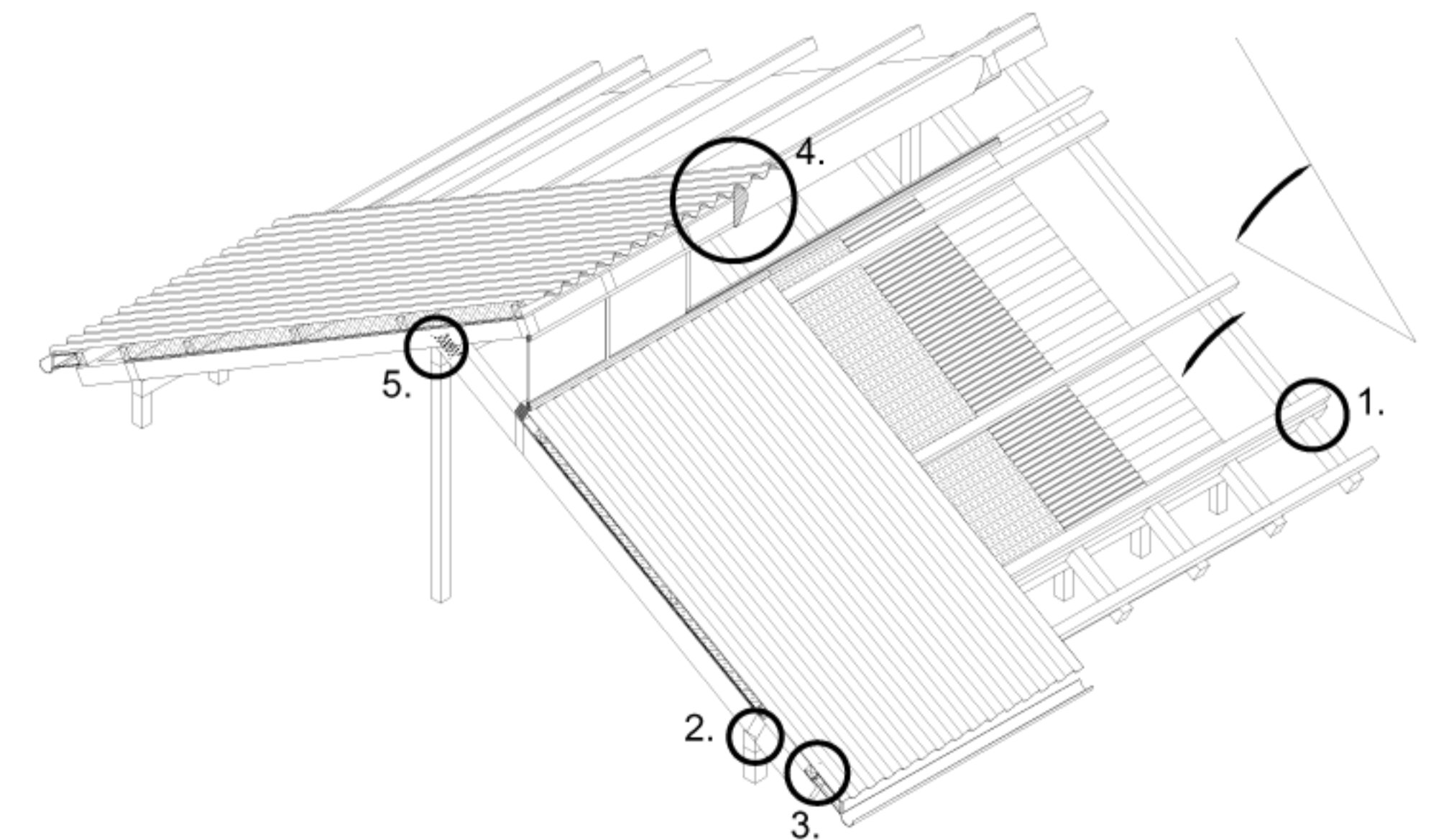
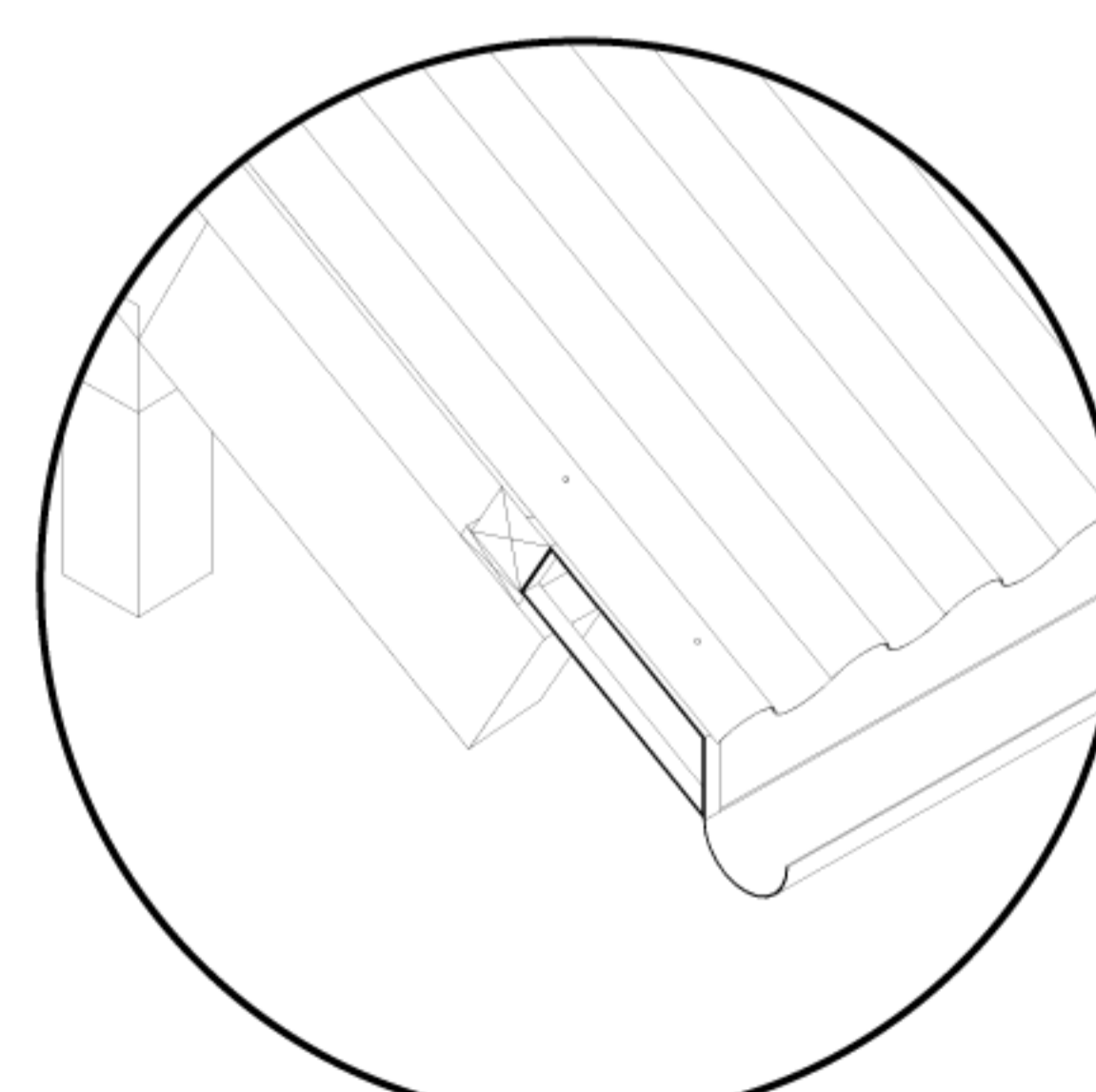
Punched metal nail plate connector  
Used to connect butt joints of timber rafter members

1:2 Detail 3.1



Corrugated sheeting  
Gutter bracket screwed into purlins  
Single ceiling board  
Sits below single purlin for over hang sheeting.  
This allows for the height raised to be consistent throughout.

1:2 Detail 3.2



1: 50 Sectional Perspective