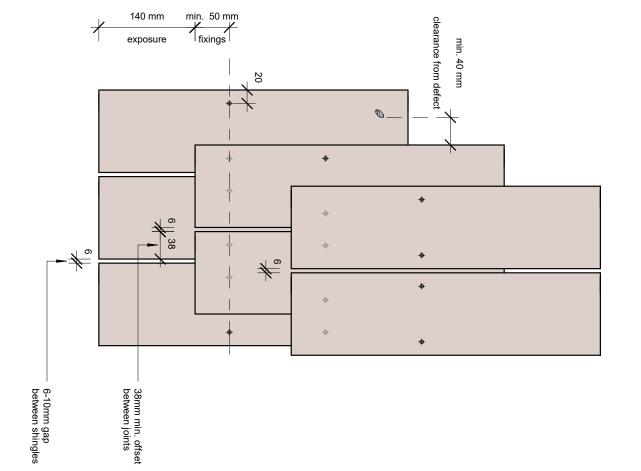


NOTE: Fix shingles with minimum 40 x 2.5mm stainless steel flat head ring shank nails to achieve minimum 19mm penetration into the batten.

Stainless steel 316 must be used when the fixing head is exposed to the weather and in sea spray zones.

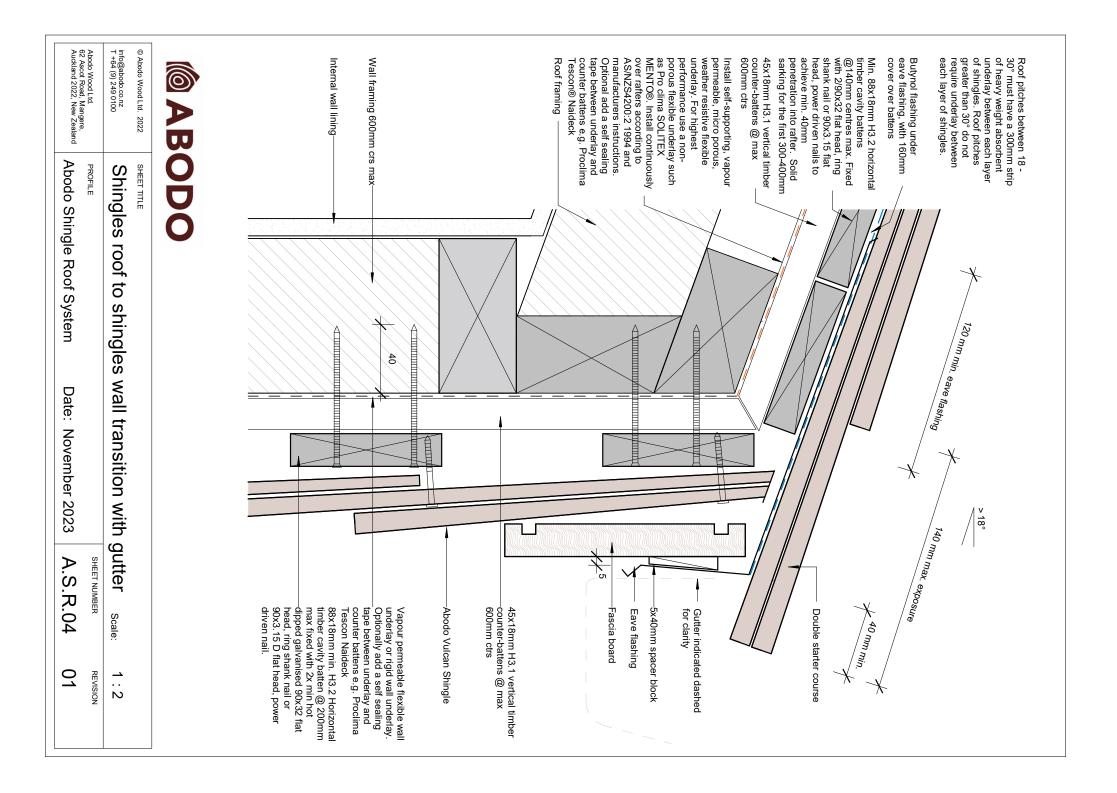


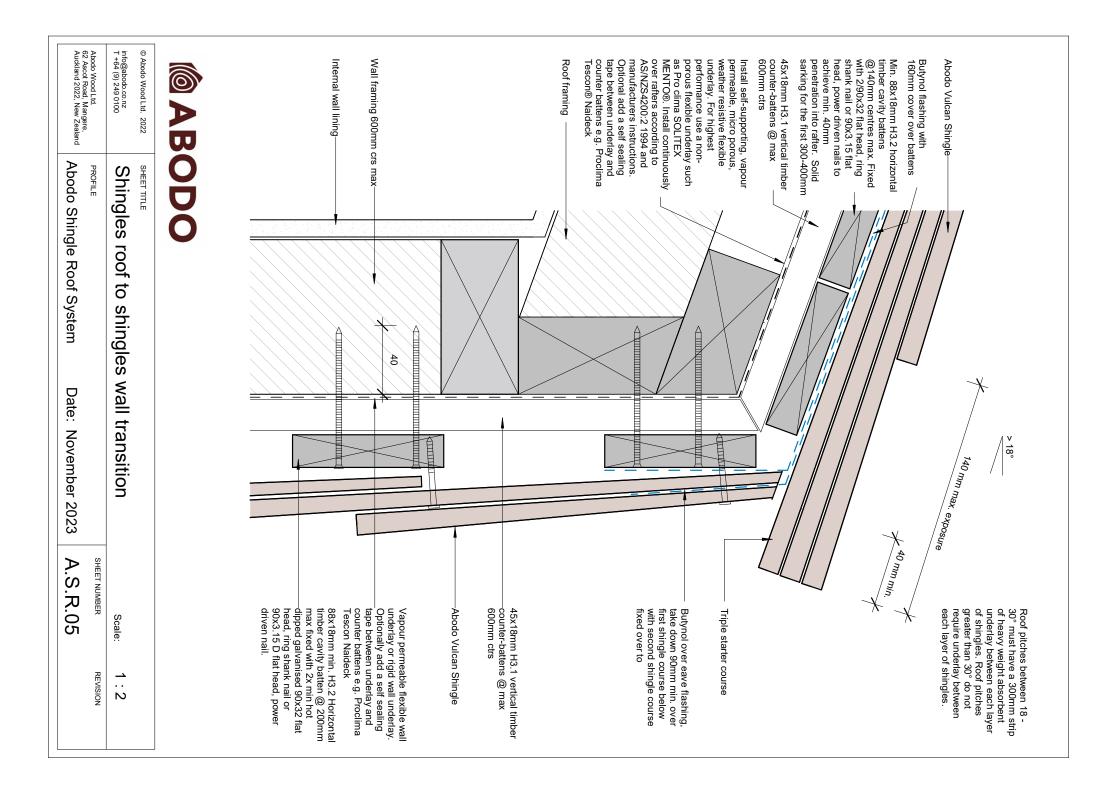
|          | A.S.R.02     | Date: November 2023 A.S.R.02 | Abodo Shingle Roof System                         | Auckland 2022, New Zealand             |
|----------|--------------|------------------------------|---|--|
| REVISION | SHEET NUMBER |                              | PROFILE   | Abodo Wood Ltd.                        |
| 1:10     | ter scale:   | isometric without gut        | Shingle roof application isometric without gutter | info@abodo.co.nz<br>T +64 (9) 249 0100 |
|          |              |                              | SHEET TITLE                                       | © Abodo Wood Ltd. 2022                 |

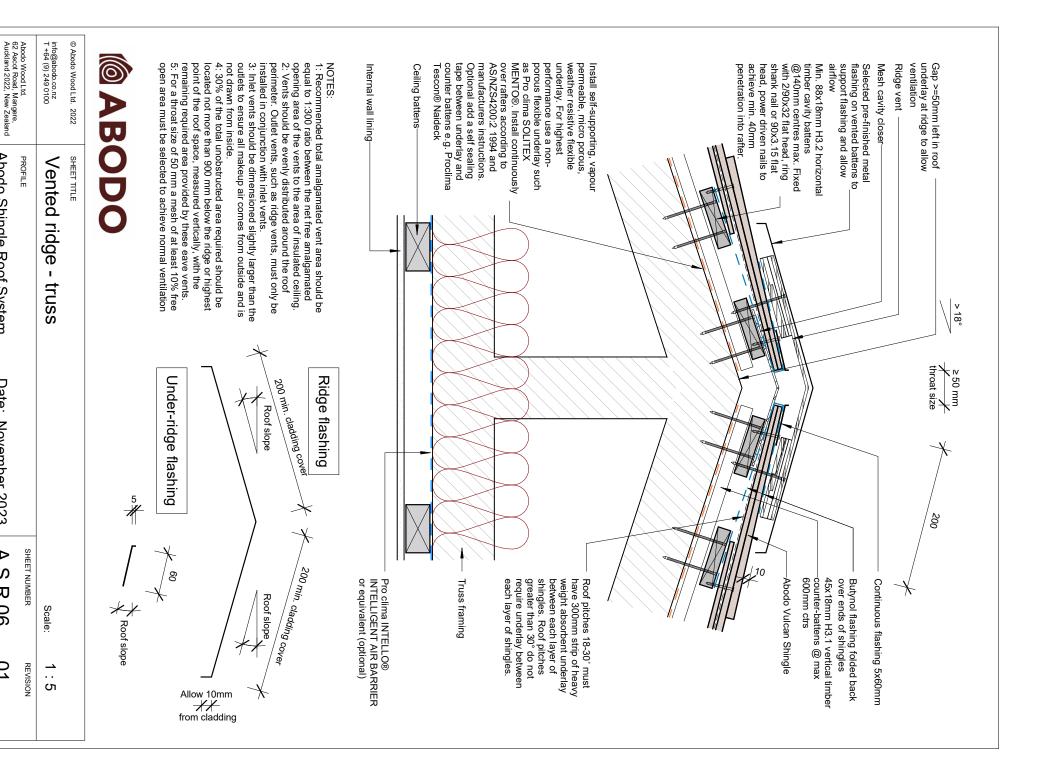




| Abodo Shingle Roof System        | Date: No | vember 2023 | Date: November 2023 A.S.R.03 |
|----------------------------------|----------|-------------|------------------------------|
|                                  |          |             | SHEET NUMBER                 |
| Shingle roof set out and fixings | fixings  |             | Scale:                       |
| SHEET TITLE                      |          |             |                              |
|                                  |          |             |                              |







Abodo Shingle Roof System

Date:

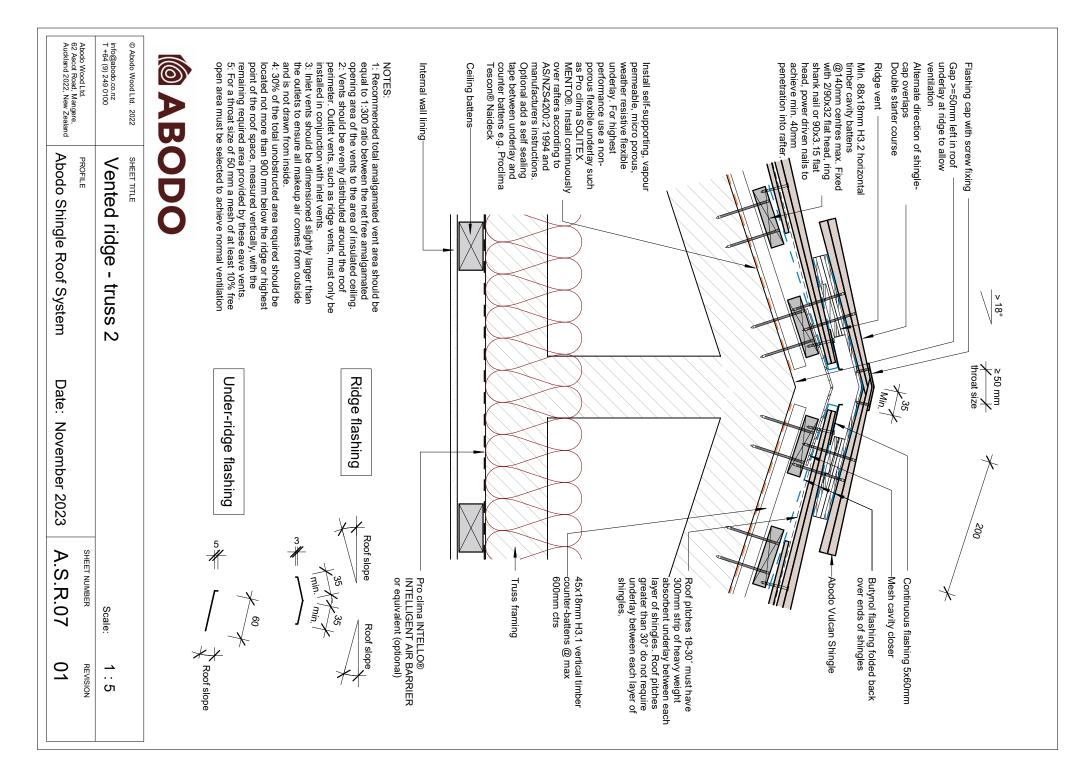
November 2023

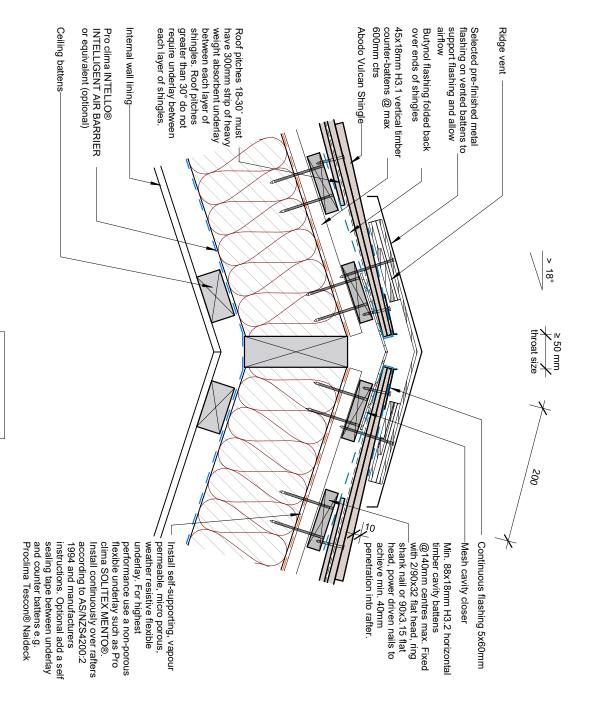
 $\triangleright$ 

S

R.06

9

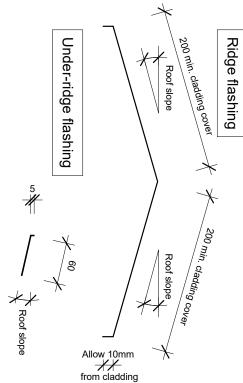




- NOTES:

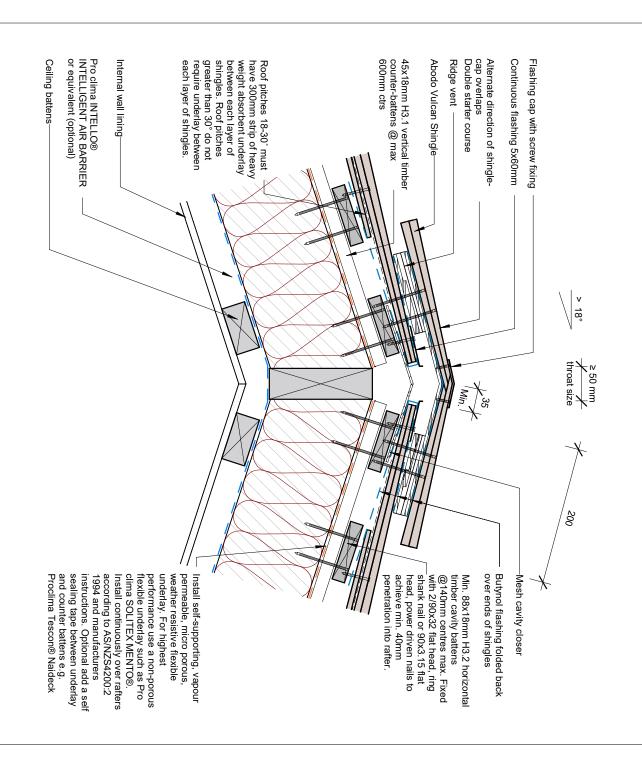
  1: Recommended total amalgamated vent area should be equal to 1:300 ratio between the net free amalgamated opening area of the vents to the area of insulated ceiling.
  2: Vents should be evenly distributed around the roof perimeter. Outlet vents, such as ridge vents, must only be installed in conjunction with inlet vents.
  3: Inlet vents should be dimensioned slightly larger than the outlets to ensure all makeup air comes from outside to the storage for the storage fo
- and is not drawn from inside.
  4: 30% of the total unobstructed area required should be located not more than 900 mm below the ridge or highest in the mof snace, measured vertically, with the point of the roof space, measured vertically, with the remaining required area provided by these eave vents.

  5: For a throat size of 50 mm a mesh of at least 10% free open area must be selected to achieve normal ventilation





| 21       | A.S.R.08     | Date: November 2023 A.S.R.08 | Abodo Shingle Roof System | Auckland 2022, New Zealand             |
|----------|--------------|------------------------------|---------------------------|--|
| REVISION | SHEET NUMBER |                              | PROFILE                   | Abodo Wood Ltd.                        |
| 1:5      | Scale:       |                              | Vented ridge - skillion   | info@abodo.co.nz<br>T +64 (9) 249 0100 |
|          |              |                              | SHEET TITLE               | © Abodo Wood Ltd. 2022                 |



- NOTES:

  1: Recommended total amalgamated vent area should be equal to 1:300 ratio between the net free amalgamated opening area of the vents to the area of insulated ceiling.

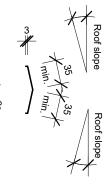
  2: Vents should be evenly distributed around the roof perimeter. Outlet vents, such as ridge vents, must only be installed in conjunction with inlet vents.

  3: Inlet vents should be dimensioned slightly larger than the outlets to ensure all makeup air comes from outside and is not drawn from inside.

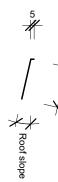
  4: 30% of the total unobstructed area required should be located not more than 900 mm below the ridge or highest point of the roof space, measured vertically, with the remaining required area provided by these eave vents.

  5: For a throat size of 50 mm a mesh of at least 10% free open area must be selected to achieve normal ventilation





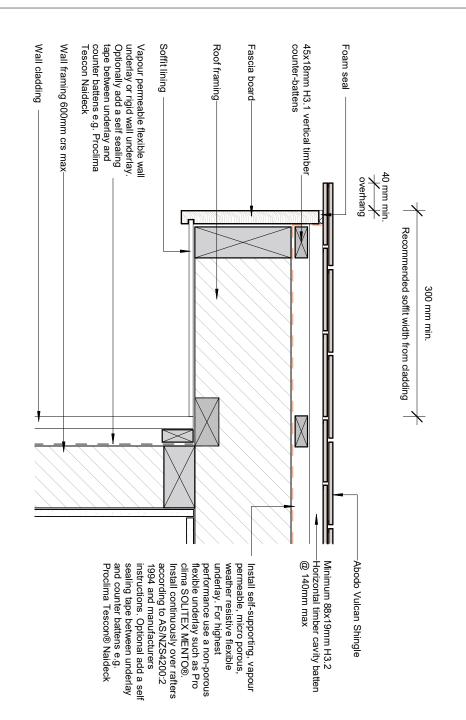
Under-ridge flashing





| © Abodo Wood Ltd. 2022                                | SHEET TITLE               |                             |              |          |
|---|---------------------------|-----------------------------|--------------|----------|
| info@abodo.co.nz<br>T +64 (9) 249 0100                | Vented ridge - skillion 2 |                             | Scale:       | 1 : 5    |
| Abodo Wood Ltd.                                       | PROFILE                   |                             | SHEET NUMBER | REVISION |
| 62 ASCOT Road, Mangere,<br>Auckland 2022, New Zealand | Abodo Shingle Roof System | Date: November 2023 A.S.R.0 | A.S.R.09     | 01       |
|   |                           |                             |              |          |

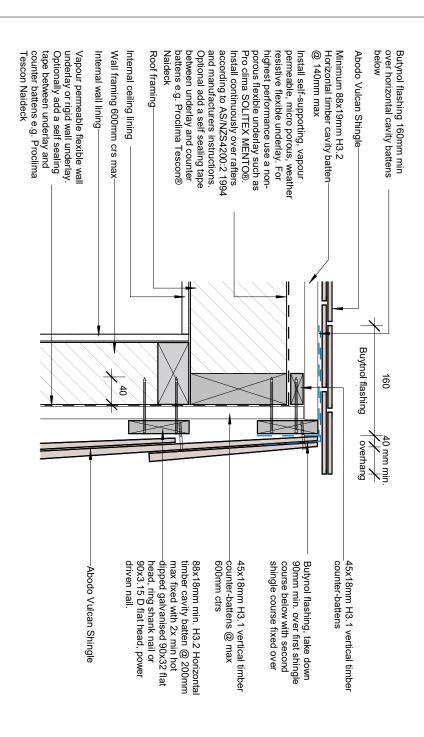
Roof pitches between 18 - 30° must have a 300mm strip of heavy weight absorbent underlay between each layer of shingles. Roof pitches greater than 30° do not require underlay between each layer of shingles.





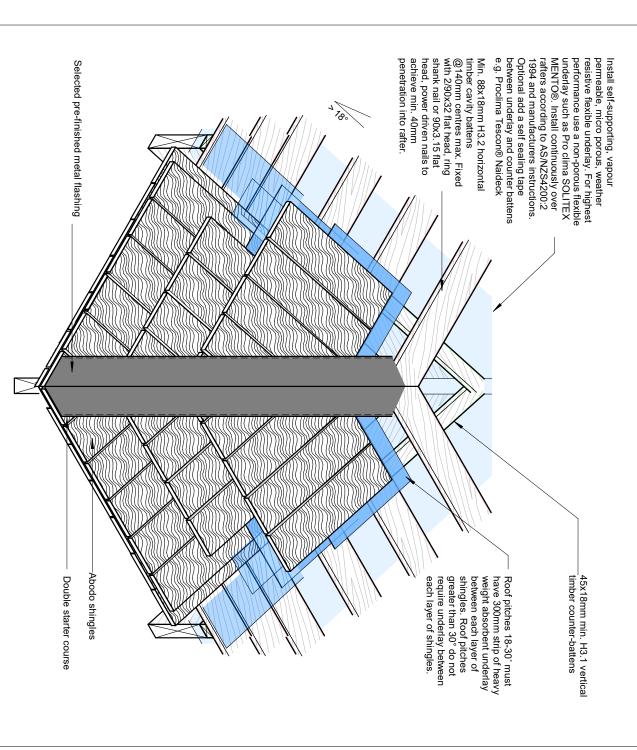
| Auckland 2022, New Zealand | Abodo Wood Ltd. | info@abodo.co.nz<br>T +64 (9) 249 0100 | © Abodo Wood Ltd. 2022 |
|----------------------------|-----------------|--|------------------------|
| Abodo Shingle Roof System  | PROFILE         | Shingle roof barge                     | SHEET TITLE            |
| Date: November 2023        |                 |  |                        |
| A.S.R.10                   | SHEET NUMBER    | Scale:                                 |                        |
| 01                         | REVISION        | 1:5                                    |                        |

Roof pitches between 18 - 30° must have a 300mm strip of heavy weight absorbent underlay between each layer of shingles. Roof pitches greater than 30° do not require underlay between each layer of shingles.



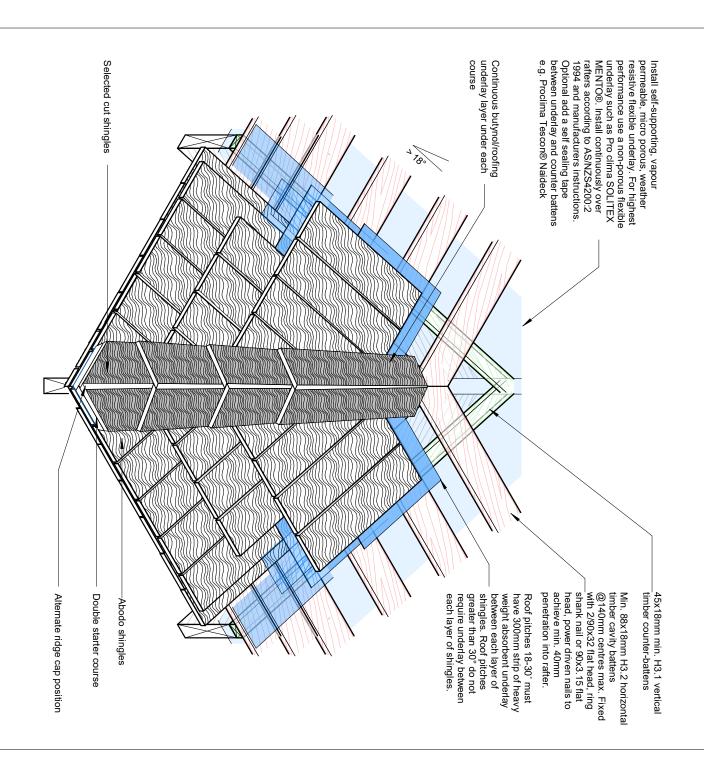


| Auc                          | Abo             | info<br>+                              | ©<br>A                 |
|------------------------------|-----------------|--|------------------------|
| Auckland 2022, New Zealand   | Abodo Wood Ltd. | info@abodo.co.nz<br>T +64 (9) 249 0100 | © Abodo Wood Ltd. 2022 |
| Abodo Shingle Roof System    | PROFILE         | Shingles roof barge 2                  | SHEET TITLE            |
| Date: November 2023 A.S.R.11 |                 |  |                        |
| A.S.R.11                     | SHEET NUMBER    | Scale:                                 |                        |
| 91                           | REVISION        | 1:5                                    |                        |



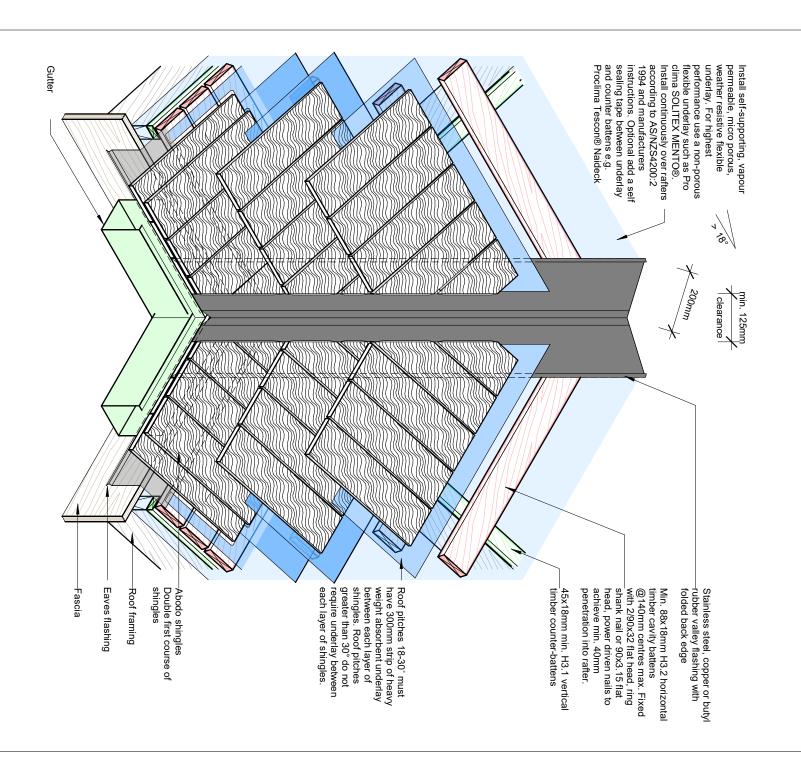


|  | ± 5 ×  |
|--|--|
| Abodo Wood Ltd.<br>62 Ascot Road, Mangere,<br>Auckland 2022, New Zealand | © Abodo Wood Ltd. 2022<br>info@abodo.co.nz<br>T +64 (9) 249 0100 |
| PROFILE  Abodo Shingle Roof System                                       | Shingles roof hip isometric                                      |
| Date: November 2023  | ic   |
| A.S.R.12   | Scale:   |
| REVISION 01  | 1:10   |



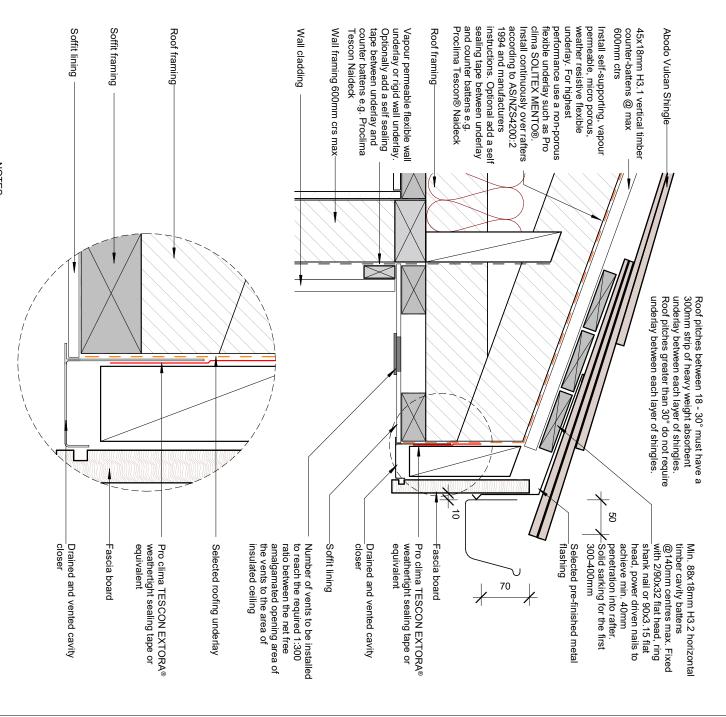


|          | A.S.R.13     | Date: November 2023 | Date:   | Abodo Shingle Roof System     | Auckland 2022, New Zealand             |
|----------|--------------|---------------------|---------|-------------------------------|--|
| REVISION | SHEET NUMBER |                     |         | PROFILE                       | Abodo Wood Ltd.                        |
| 1:10     | Scale:       |                     | etric 2 | Shingles roof hip isometric 2 | info@abodo.co.nz<br>T +64 (9) 249 0100 |
|          |              |                     |         | SHEET TITLE                   | © Abodo Wood Ltd. 2022                 |
|          |              |                     |         |                               |  |





| 9        | A.S.R.14     | Date: November 2023 | Abodo Shingle Roof System [    | Auckland 2022, New Zealand                 |
|----------|--------------|---------------------|--------------------------------|--|
| REVISION | SHEET NUMBER |                     | PROFILE                        | Abodo Wood Ltd.<br>62 Ascot Road, Mangere. |
| 1:10     | Scale:       | tric                | Shingles roof valley isometric | info@abodo.co.nz<br>T +64 (9) 249 0100     |
|          |              |                     | SHEET TITLE                    | © Abodo Wood Ltd. 2022                     |

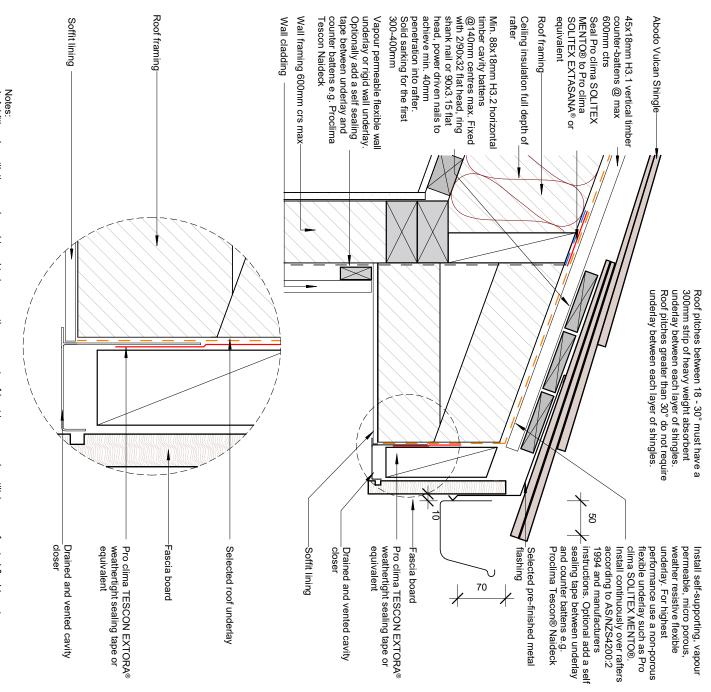


- NOTES: 1: Addition
- 1: Additional ventilation can be achieved to increase the purge rate of heat in summer by utilising a perforated flashing at eave.

  2: Recommended total amalgamated vent area should be equal to 1:300 ratio between the net free amalgamated opening area of the vents to the area of insulated ceiling. Vents should be evenly distributed around the roof perimeter. Outlet vents, such as ridge vents, must only be installed in conjunction with inlet vents. Inlet vents should be dimensioned slightly larger than the outlets to ensure all makeup air comes from outside and is not drawn from inside. 30% of the total unobstructed area required should be located not more than 900 mm below the ridge or highest point of the roof space, measured vertically, with the remaining required area provided by these eave vents



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|--------------------------------|-----------------|--|------------------------|
| Abodo Shingle Roof System Date | PROFILE         | Eave vented fascia truss               | SHEET TITLE            |
| Date: November 2023 A.S.R.15   |                 |  |                        |
| A.S.R.15                       | SHEET NUMBER    | Scale:                                 |                        |
| 01                             | indicated       | As                                     |                        |



- Additional ventilation can be achieved to increase the purge rate of heat in summer by utilising a perforated flashing at
- the eave.

  2. For normal ventilation eaves soffit vents with an aggregated free opening area equal to 200cm2 per linear metre of 2. For normal ventilation eaves soffit vents with an aggregated free opening area equal to 200cm2 per linear metre of eave shall be distributed evenly around eaves and used in combination with 20mm high counter battens.

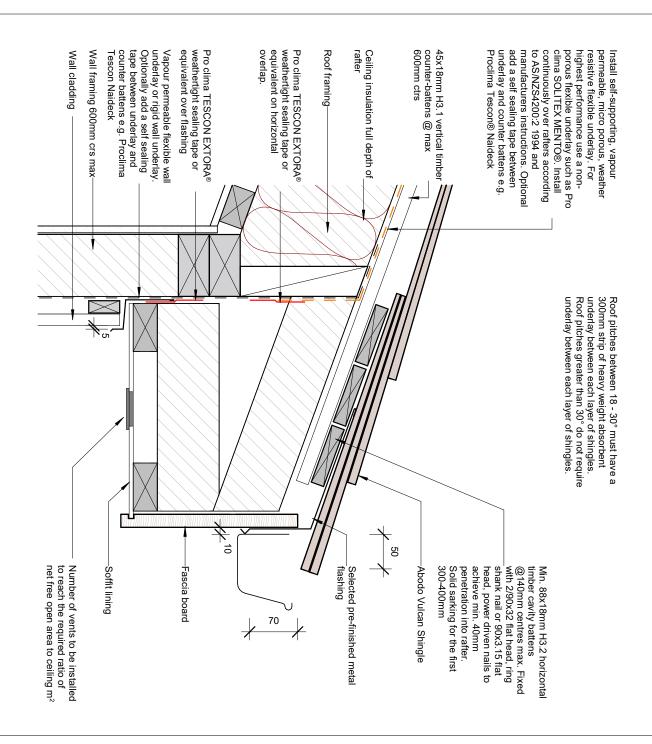
  For strong ventilation eave soffit vents with an aggregated free opening area equal to 400cm2 per linear metre of eave shall be distributed evenly around eaves and used in combination with 45mm high counter battens.

AUSTRALIA ONLY:

1. Vents/Cavity closers must meet AS 3959 requirements for bushfire protection up to BAL 40. This can be achieved by fitting an ember guard made of non-combustible material or a mesh or perforated sheet with < 2 mm holes and made of corrosion-resistant steel or bronze.



| © Abodo Wood Ltd. 2022    Info@abodo.co.nz   T+64 (9) 249 0100    Abodo Wood Ltd. 2022   SHEET INTLE   Scale:    Abodo Wood Ltd. 2022   Abodo Scaland   PROFILE   PROF | 1 | 7.0.1.       |                     | Abodo offinigio Roof Oystorii |                                       |
|--|---|--------------|---------------------|-------------------------------|---------------------------------------|
| Eave vented fascia skillion  Scal  PROFILE  SHEET INLIE  Scal  |   | Δ Λ D 16     | Date: November 2023 | Ahodo Shingle Roof System     | Auckland 2022, New Zealand            |
| Eave vented fascia skillion scal   |   | SHEET NUMBER |                     | PROFILE                       | Abodo Wood Ltd.                       |
|  |   | _            | llion               | Eave vented fascia ski        | info@abodo.co.nz<br>T+64 (9) 249 0100 |
|  |   |              |                     | SHEET TITLE                   | © Abodo Wood Ltd. 2022                |



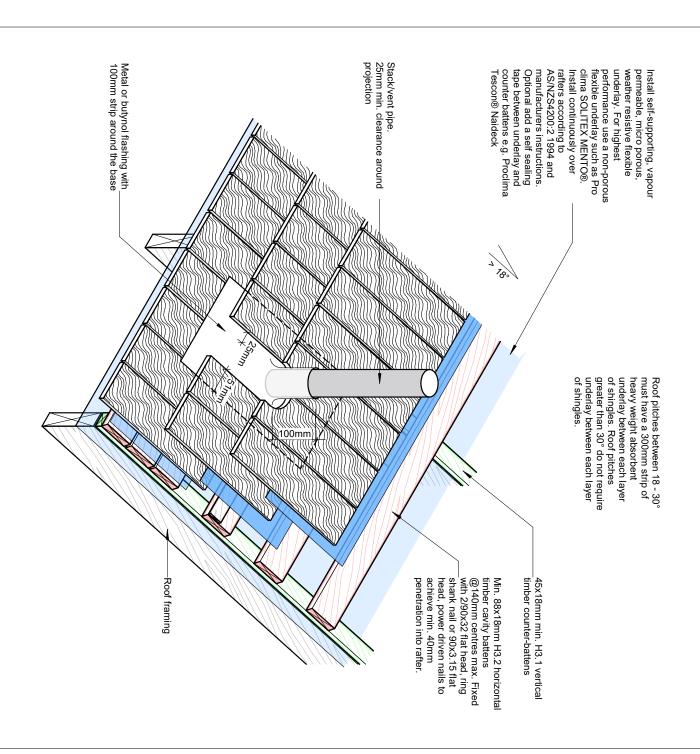
- Notes: 1: Additional ventilation can be achieved to increase the purge rate of heat in summer by utilising a perforated flashing at
- the eave.

  2: For normal ventilation eaves soffit vents with an aggregated free opening area equal to 200cm2 per linear metre of 2: For shall be distributed evenly around eaves and used in combination with 20mm high counter battens. For strong ventilation eave soffit vents with an aggregated free opening area equal to 400cm2 per linear metre of eave shall be distributed evenly around eaves and used in combination with 45mm high counter battens.

# AUSTRALIA ONLY: 1. Vents/Cavity clos

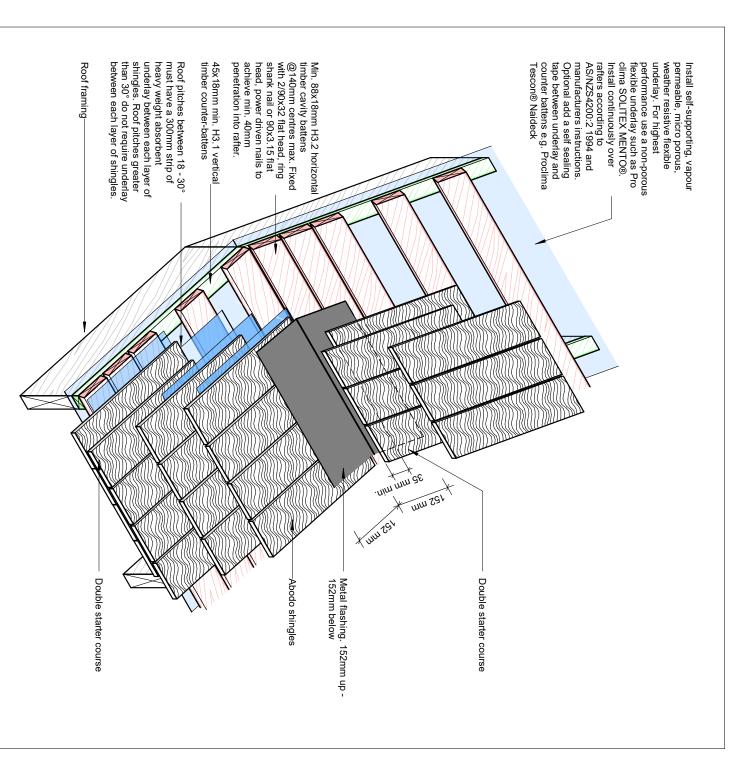
Vents/Cavity closers must meet AS 3959 requirements for bushfire protection up to BAL 40. This can be achieved by
fitting an ember guard made of non-combustible material or a mesh or perforated sheet with < 2 mm holes and made of
corrosion-resistant steel or bronze.</li>

|                           | Abodo Wood Ltd.  PROFILE  PROFILE | info@abodo.co.nz<br>T +64 (9) 249 0100 | © Abodo Wood Ltd. 2022 SHEET TITLE |
|---------------------------|-----------------------------------|--|------------------------------------|
| Abodo Shingle Roof System |                                   | Eave vented soffit skillion            |                                    |
| Date: November 2023       |                                   | ו                                      |                                    |
| A.S.R.17                  | SHEET NUMBER                      | Scale:                                 |                                    |
| 01                        | REVISION                          | 1 : 5                                  |                                    |





| 01       | A.S.R.18     | Date: November 2023 A.S.R.18 | Abodo Shingle Roof System | Auckland 2022, New Zealand                 |
|----------|--------------|------------------------------|---------------------------|--|
| REVISION | SHEET NUMBER |                              | PROFILE                   | Abodo Wood Ltd.<br>62 Ascot Road, Mangere, |
| 1:10     | Scale:       |                              | Shingle roof penetration  | info@abodo.co.nz<br>T +64 (9) 249 0100     |
|          |              |                              | SHEET TITLE               | © Abodo Wood Ltd. 2022                     |





| Ó | A.S.R.19     | Date: November 2023   A.S.R.19 | Abodo Shingle Roof System | Auckland 2022, New Zealand             |
|---|--------------|--------------------------------|---------------------------|--|
|   | SHEET NUMBER |                                | PROFILE                   | Abodo Wood Ltd.                        |
| 1 | Scale:       |                                | Transition roof angle     | info@abodo.co.nz<br>T +64 (9) 249 0100 |
|   |              |                                | SHEET TITLE               | © Abodo Wood Ltd. 2022                 |