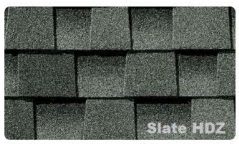
GAF

North America's Largest Roofing Manufacturer

Timberline® Colours



GAF Shingle Roof Design Details

5th July 2018

New Zealand GAF Distributor

UltraGuard® Roofing Systems

BRANZ Appraised
Appraisal No.529

GAF Shingle Roof Systems

System Description

GAF Asphalt Roof Shingles are glass-fibre reinforced asphalt shingles surfaced with ceramic coated mineral chips. They are available in the following series types: Timberline, Timberline Lifetime, Camelot, Camelot 2, Slateline and Grand Sequoia.

The shingles and flashing accessories form a roofing system when installed over a plywood substrate and roofing underlayment.

Scope

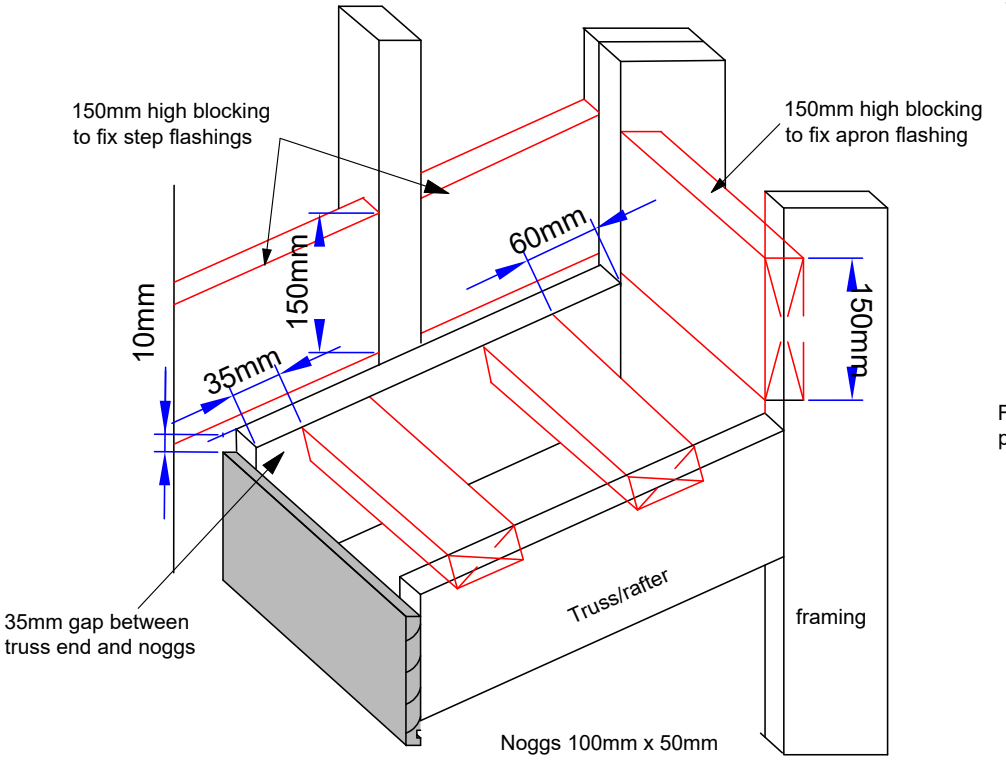
GAF Asphalt Roof Shingles have been appraised as a roof cladding for buildings within the following scope:

- the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1, with regard to floor plan area and building height; and,
- constructed with timber roof framing and plywood sheathing complying with the NZBC; and,
- where the roof slope is 9º or greater; and,
- situated in NZS 3604 Wind Zones up to, and including, Extra High.

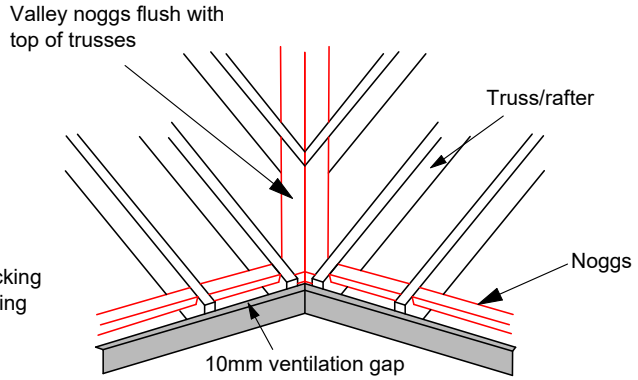
The system must be installed in accordance with the Technical Literature by a Roofing Logistics NZ Ltd trained and approved installer.

Shingle Roof Installation Details:

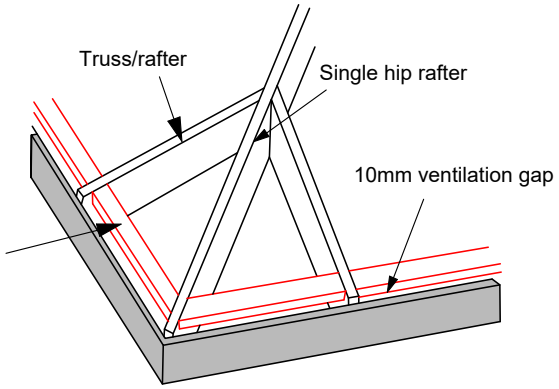
GAF ASPHALT SHINGLE ROOFING TECHNICAL DOCUMENTS
GAF ASPHALT SHINGLE SET OUT
SHINGLE ROOF EAVE
SHINGLE ROOF APRON FLASHING
SHINGLE ROOF APRON FLASHING WITH VENT
SHINGLE ROOF TO WALL RIDGE
SHINGLE ROOF TO WALL RIDGE WITH VENT
SHINGLE ROOF RIDGE CAP WITH VENT
SHINGLE ROOF RIDGE BEAM WITH VENT
SHINGLE ROOF SLOPE TO WALL
SHINGLE ROOF PITCH CHANGE
SHINGLE ROOF MEMBRANE TRANSITION
SHINGLE ROOF PITCH CHANGE – MANSARD
SHINGLE ROOF PVC STOP END FLASHING
SHINGLE ROOF STEP FLASHING
SHINGLE ROOF BARGE END
SHINGLE ROOF APRON TERMINATION
SHINGLE ROOF KICK OUT FLASHING
SHINGLE ROOF GABLE TO RIDGE
SHINGLE ROOF DUTCH DROMER GABLE
SHINGLE ROOF SPECIFIC PENETRATION
SHINGLE ROOF CHIMNEY CRICKET
SHINGLE ROOF VALLEY TO DORMER
SHINGLE ROOF RAIN WATER SPREADER
SHINGLE ROOF PIPE PENETRATION
SHINGLE ROOF MASTER FLOW RT65 BOX VENT
SHINGLE ROOF VALLEY CLADDING
SHINGLE ROOF PENETRATION OPENINGS
SHINGLE ROOF HIP & RIDGE CAP
SHINGLE ROOF FASTENING DETAIL AND REPAIR
SHINGLE ROOF RIDGE TO WALL
SHINGLE ROOF TO WALL FLASHINGS
SHINGLE ROOF TO WALL CORNERS
SHINGLE ROOF INTERNAL VALLEY CRICKET
SHINGLE ROOF PV SOLAR PANEL MOUNT
SHINGLE ROOF SURFACE INTAKE VENT
SHINGLE ROOF SURFACE EXHAUST VENT
INTERTENANCY ROOF JUNCTION (GIB)
INTERTENANCY ROOF JUCTION (BLOCK WALL)
INTERTENANCY ROOF JUCTION (GIB RIDGE APEX)
SHINGLE ROOF DUTCH DROMER GABLE CONSTRUCTION NOTES



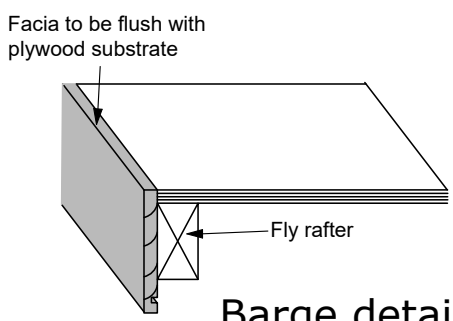
Wall roof intersection



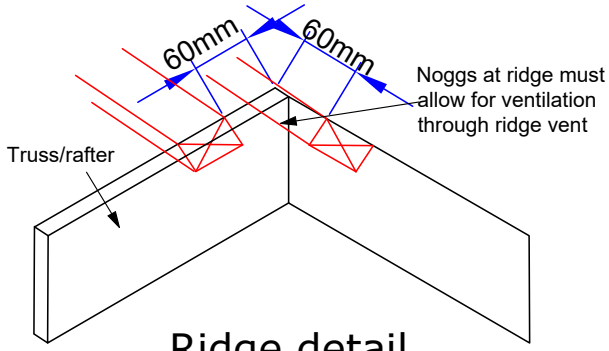
Valley detail



Hip detail



Barge detail



Ridge detail

GAF Asphalt shingle roofing technical documents

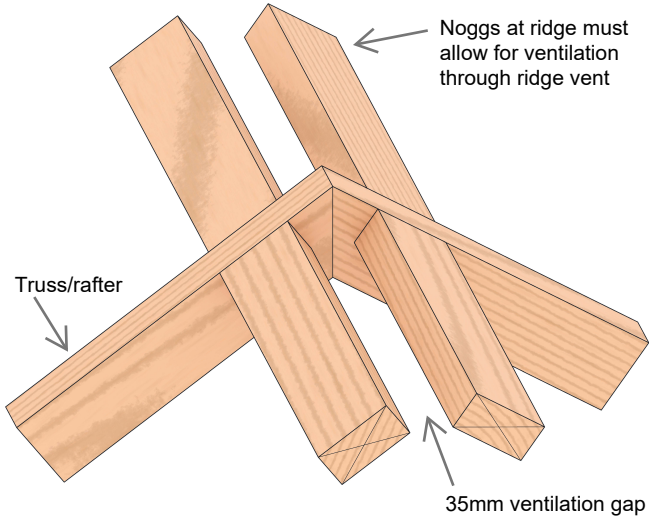
Scale: N.T.S.

Notes: This detail is in accordance with the BRANZ Appraisal certification. Contact us for any required customization.

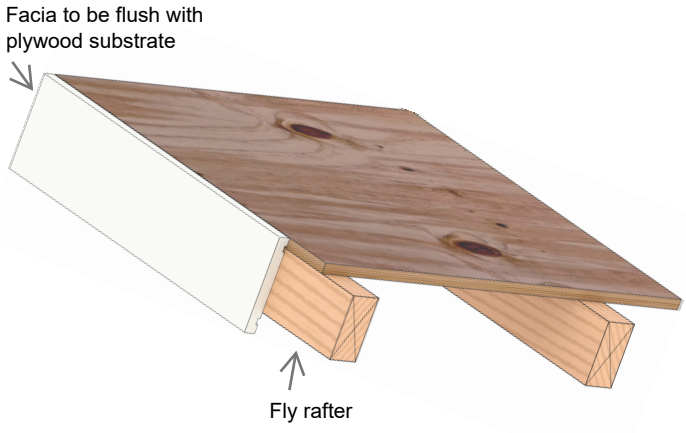
Technical Support and Advice:
Email: technical@gaf.nz
Call: 0800 42 33 55
Web: www.gafroofing.co.nz
GAF New Zealand Distributor

Drawing Title: Builders Cross Section Set Out		
REF: S-100A	Date: 05/07/2018	Version: A

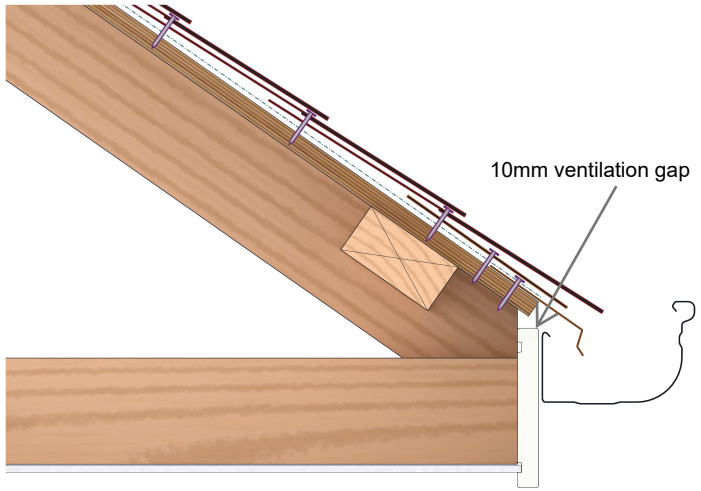
Ridge detail

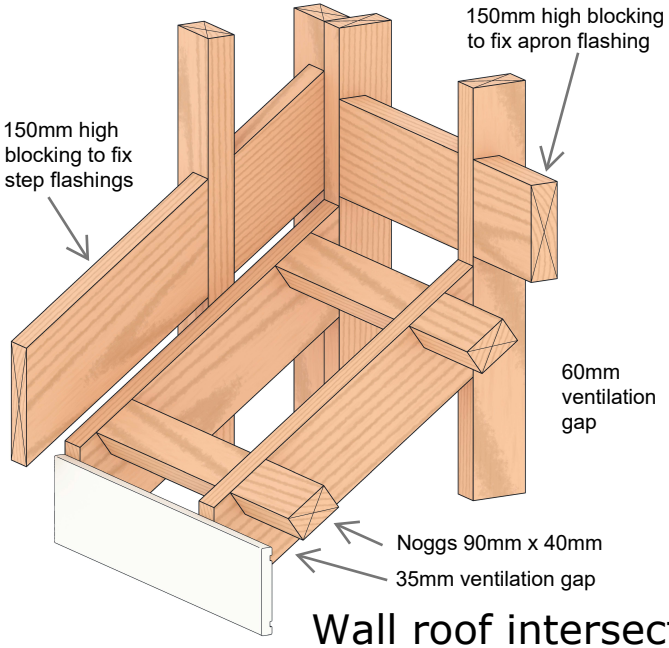


Barge detail

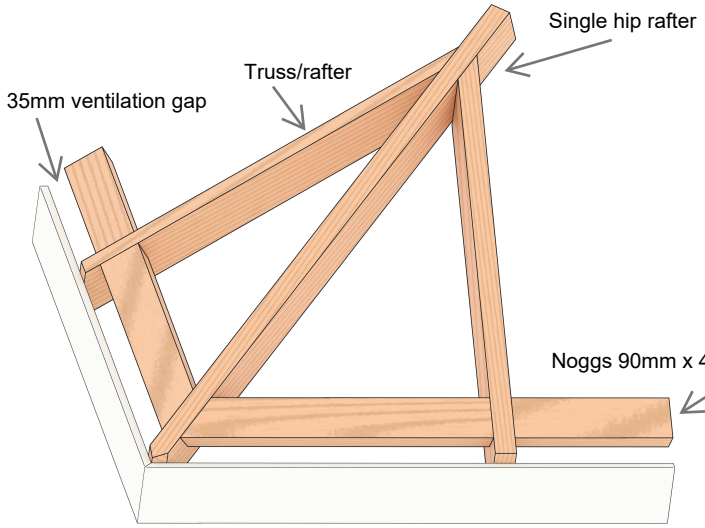


Eave detail

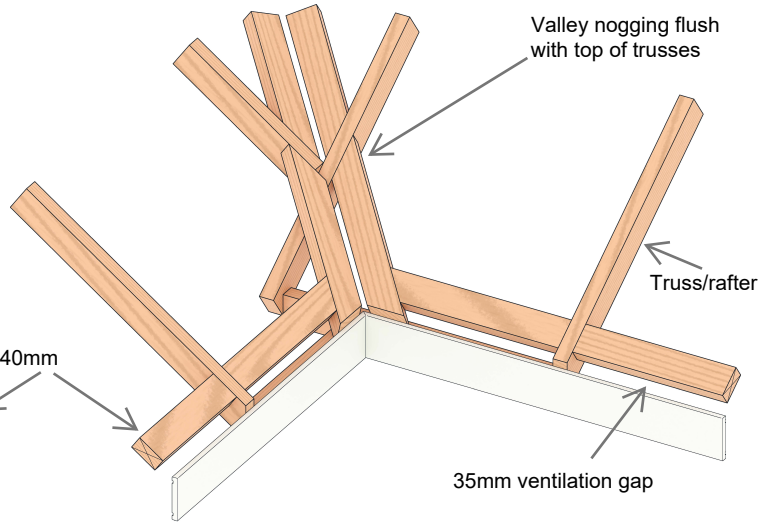




Wall roof intersection



Valley detail



Valley detail

GAF Shingle Roof Systems

UltraGuard Roofing Systems

BRANZ Appraised Appraisal No.529

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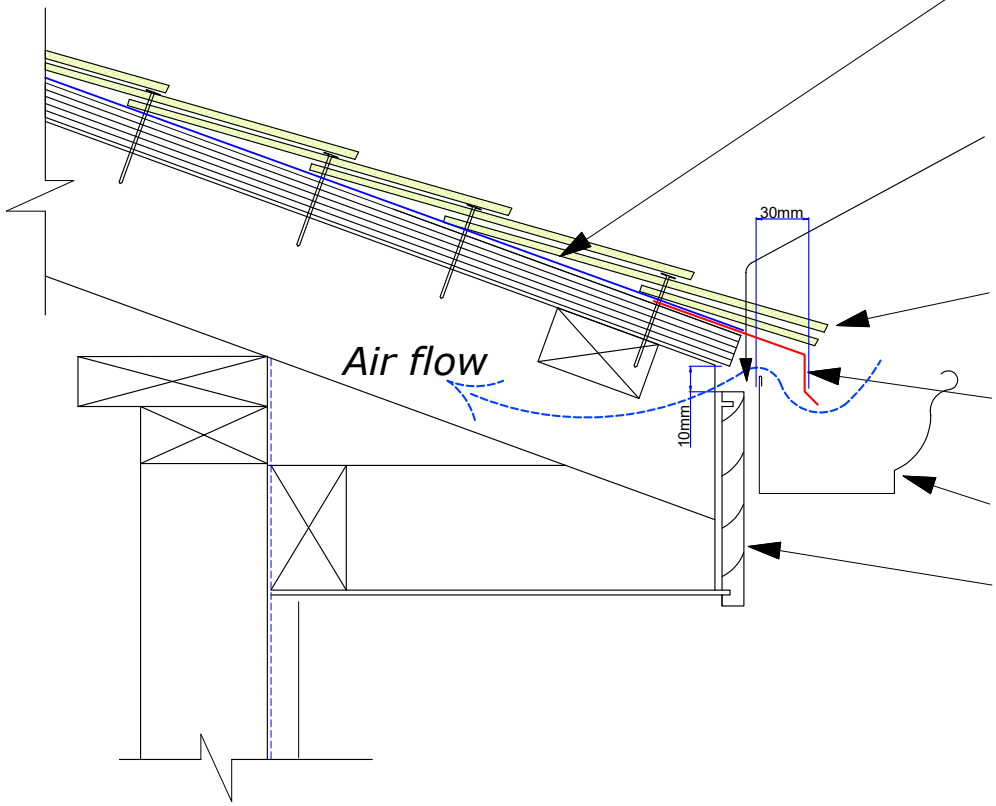
GAF New Zealand Distributor

Drawing Title: GAF Asphalt Shingle Set Out - N.T.S

REF:	Date:	Version:
S-100B	05/07/2018	B

Note: Min roof picth = 9° with Weatherwatch barrier



D-226+ UltraGuard roofing underlay over 15mm plywood substrate to be laid so as to extend over drip edge toward gutter

Plywood to terminate over the top of the outside face of fascia, Plywood should not extend past outside face of fascia. H3 plywood gutter strip not required. Drip edge flashing to hang into gutter

Shingles to have min 5mm overhang to gutter

Drip edge flashing with min 90mm return and 20mm face with 10mm kick out

Selected gutter

Selected fascia board

Note: 10mm gap between substrate and fascia to allow for ventilation

Notes:
It is recommended fascia to be installed before roof plywood substrate.

SHINGLE ROOF EAVE

Scale: N.T.S.

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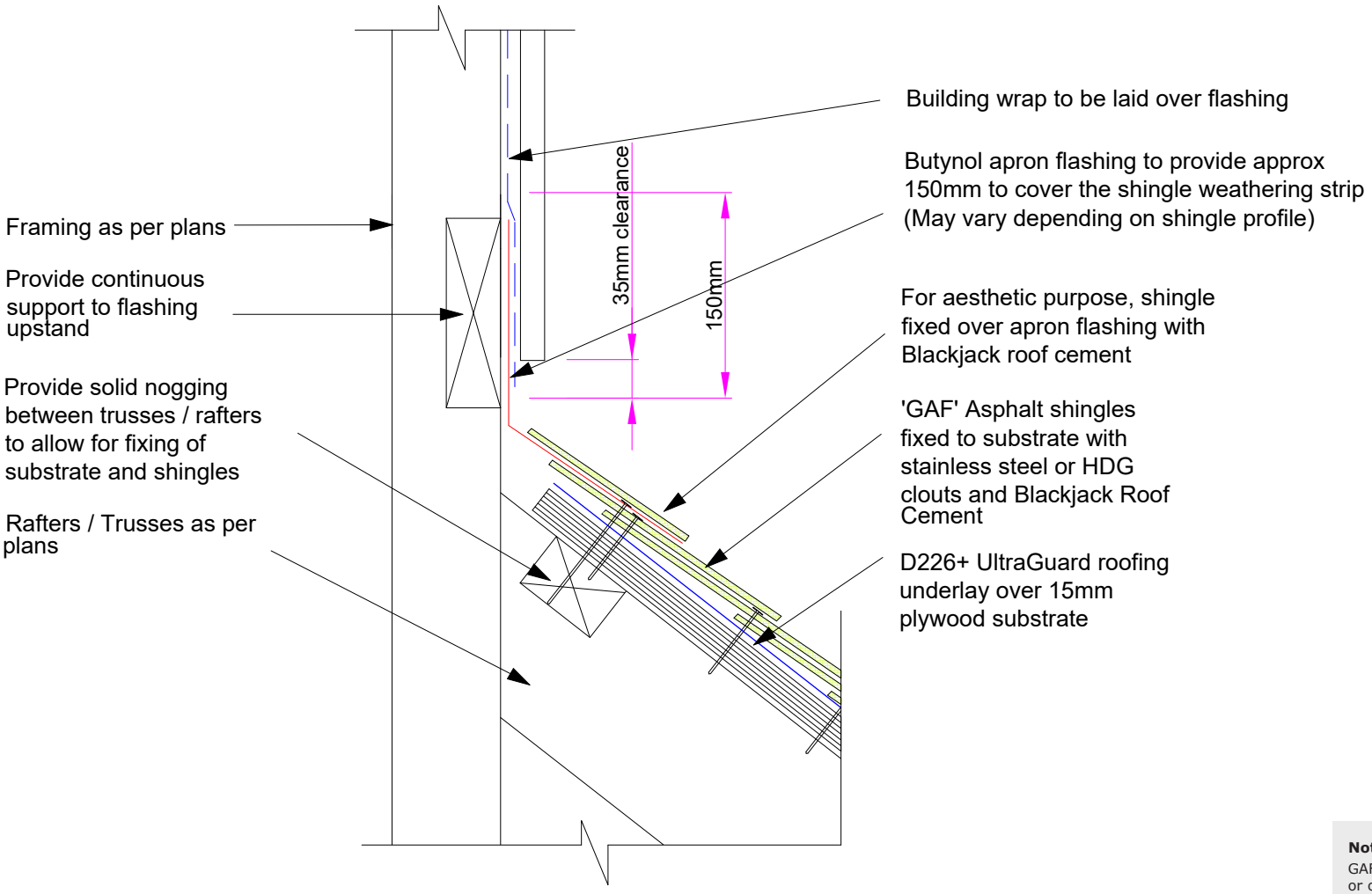
Drawing Title: GAF Asphalt Shingle Roofing

REF:	Date:	Version:
S-103	05/07/2018	A



SHINGLE ROOF APRON FLASHING

Scale: N.T.S.

Notes:
GAF RT65 Masterflow box vent or other approved cavity vent maybe used.

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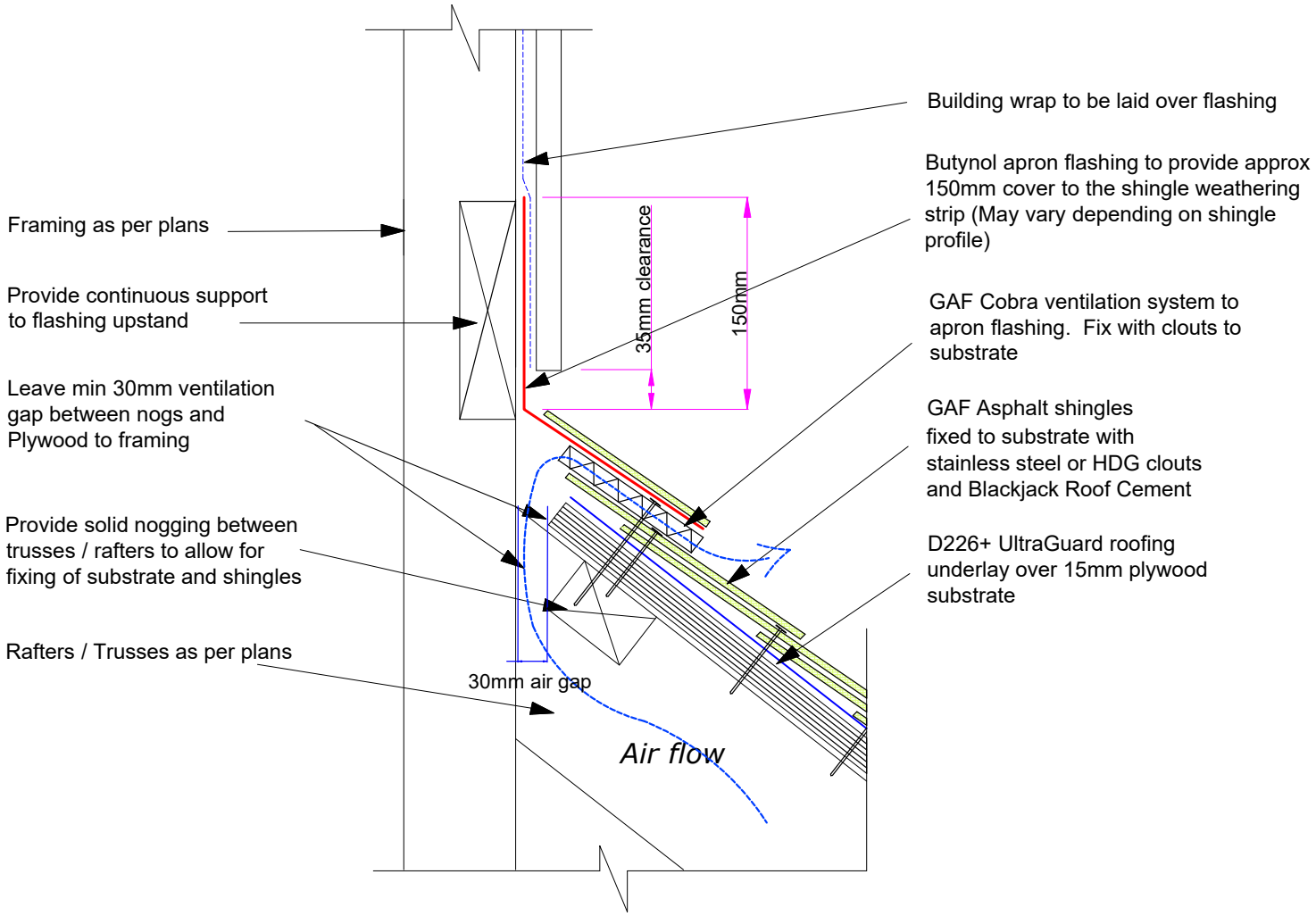
Drawing Title: GAF Asphalt Shingle Roofing		
REF: S-104	Date: 05/07/2018	Version: A



SHINGLE ROOF APRON FLASHING WITH VENT

Scale: N.T.S.

Notes:
GAF RT65 Masterflow box vent or other approved cavity vent maybe used instead of Cobra ventilation under the apron flashing.

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UltraGuard Roofing Systems

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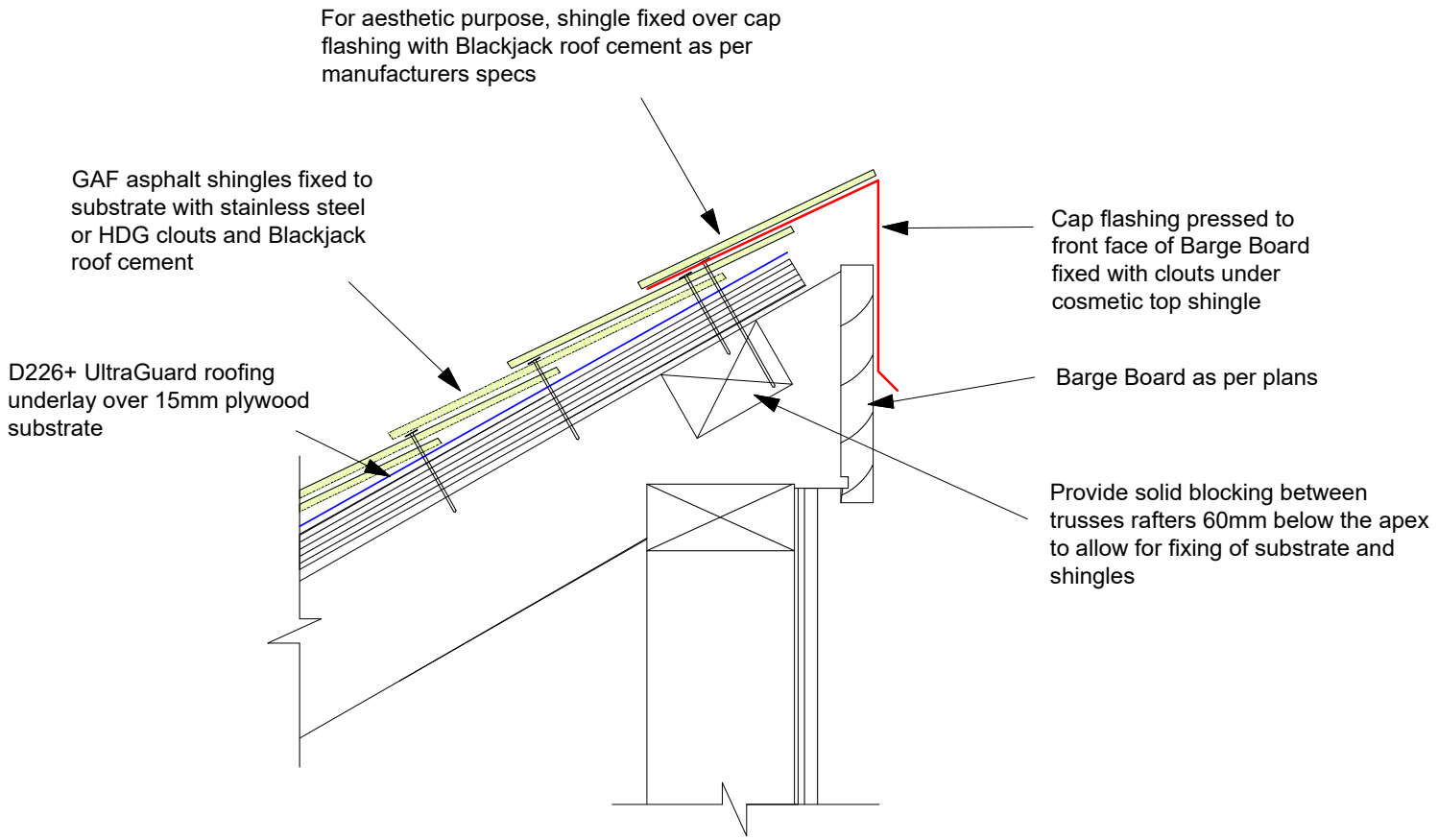
Drawing Title: GAF Asphalt Shingle Roofing		
REF: S-105	Date: 05/07/2018	Version: A



SHINGLE ROOF TO WALL RIDGE

Scale: N.T.S.

Notes:
GAF RT65 Masterflow box vent or other approved cavity vent maybe used instead of Cobra ventilation under the flashing.

Cavity or soffit vent can be used inplace of roof vents as required.

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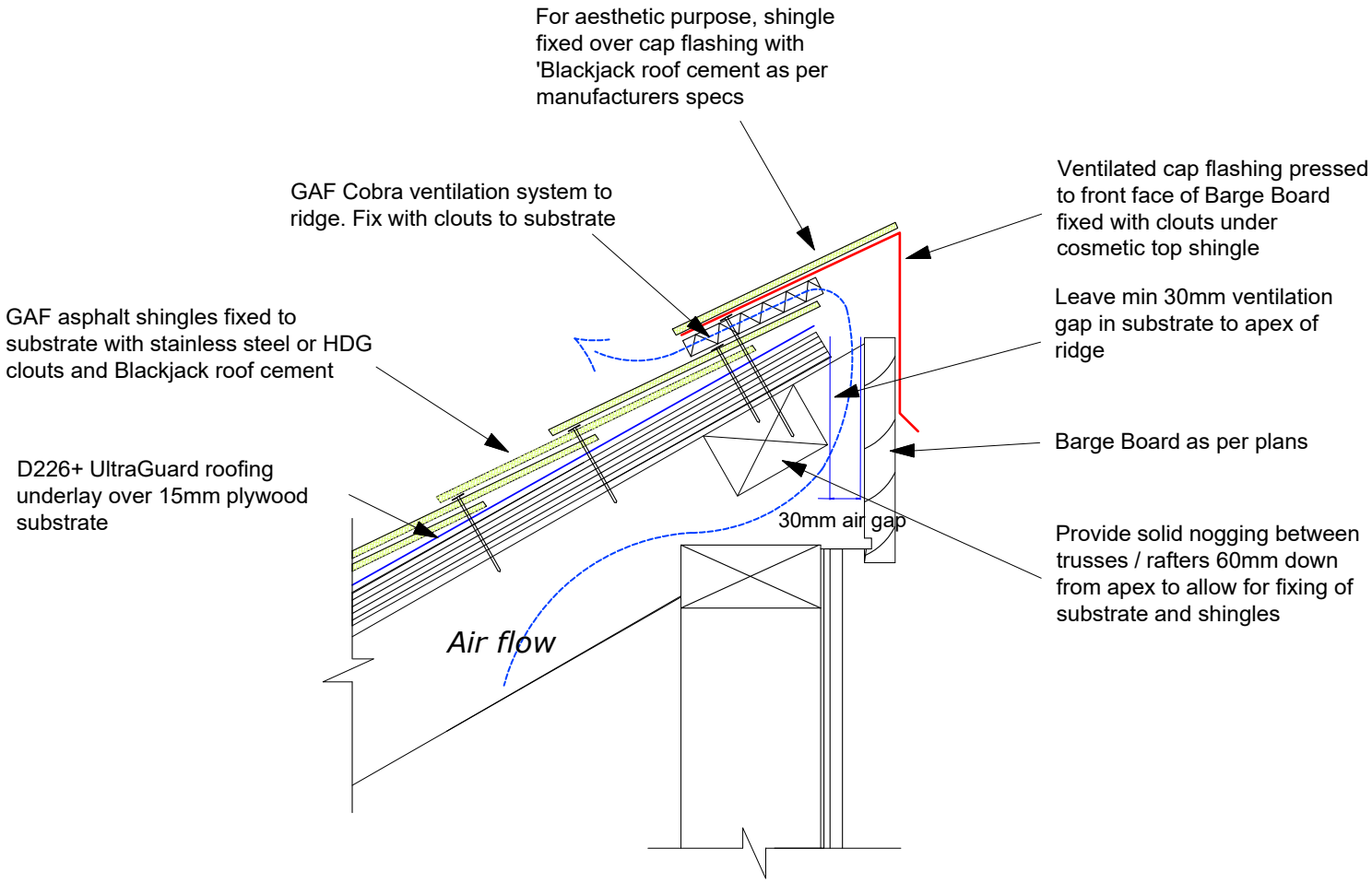
Drawing Title: GAF Asphalt Shingle Roofing

REF:	Date:	Version:
S-106	05/07/2018	A



SHINGLE ROOF TO WALL RIDGE WITH VENT

Scale: N.T.S.

Notes:
GAF RT65 Masterflow box vent or other approved cavity vent maybe used instead of Cobra ventilation under the flashing.

Cavity or soffit vent can be used inplace of roof vents as required.

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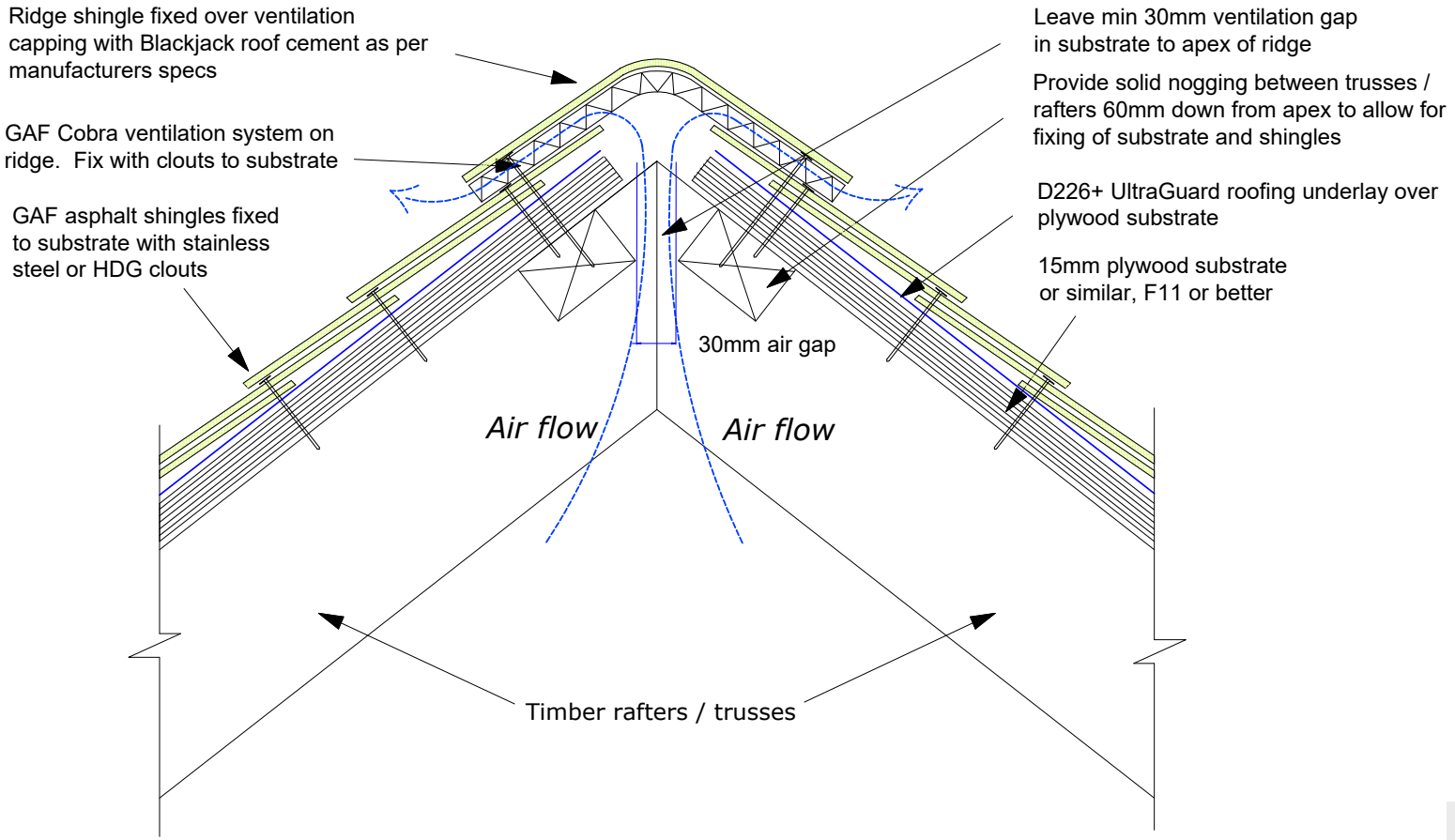
Drawing Title: GAF Asphalt Shingle Roofing

REF:	Date:	Version:
S-107	05/07/2018	A



SHINGLE ROOF RIDGE CAP WITH VENT

Scale: N.T.S.

Notes:
GAF RT65 Masterflow box vent or other approved cavity vent maybe used instead of Cobra ventilation under ridge cap.

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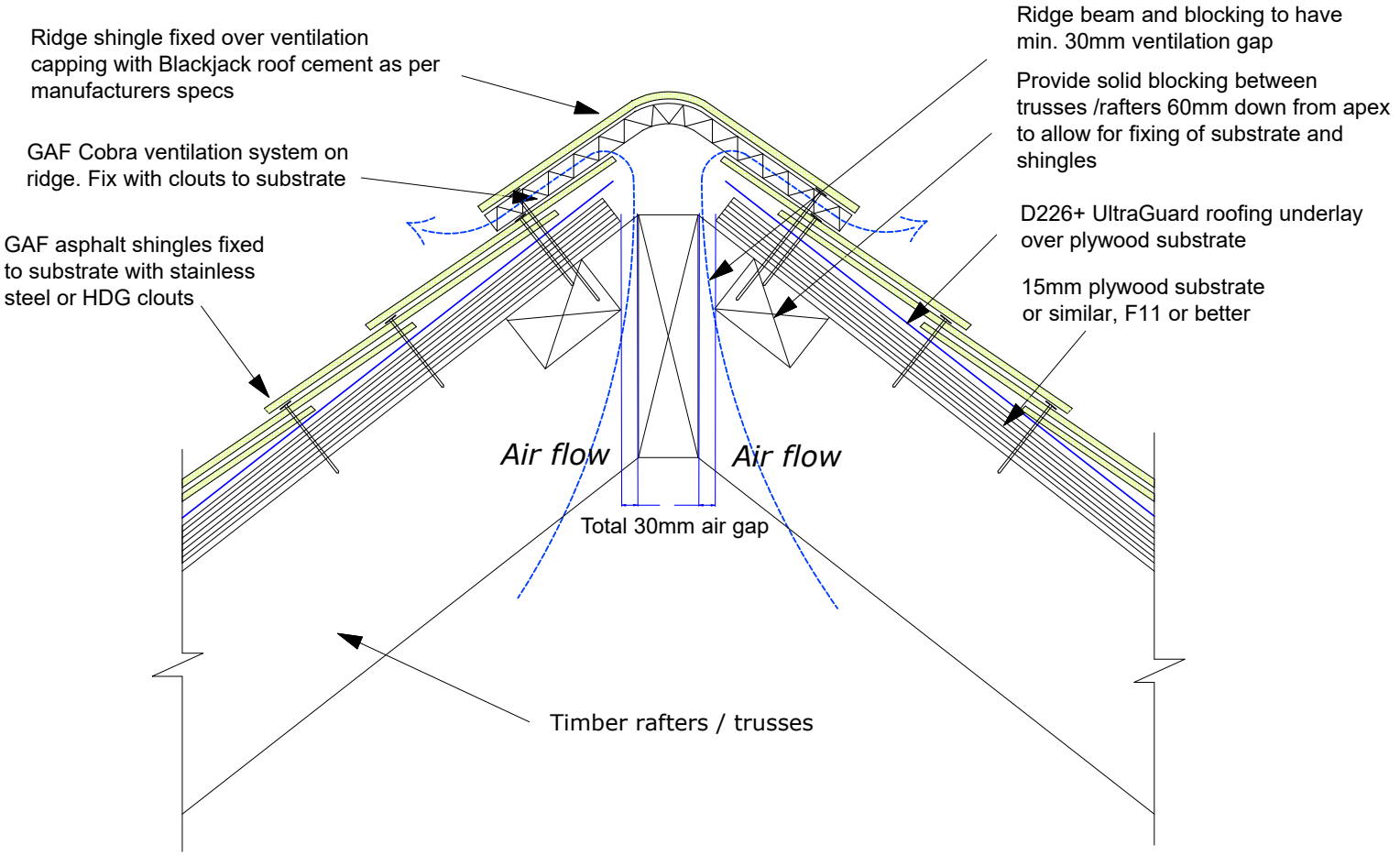
Drawing Title: GAF Asphalt Shingle Roofing

REF:	Date:	Version:
S-108	05/07/2018	A



SHINGLE ROOF RIDGE BEAM WITH VENT

Scale: N.T.S.

Notes:
GAF RT65 Masterflow box vent or other approved cavity vent maybe used instead of Cobra ventilation under ridge cap.

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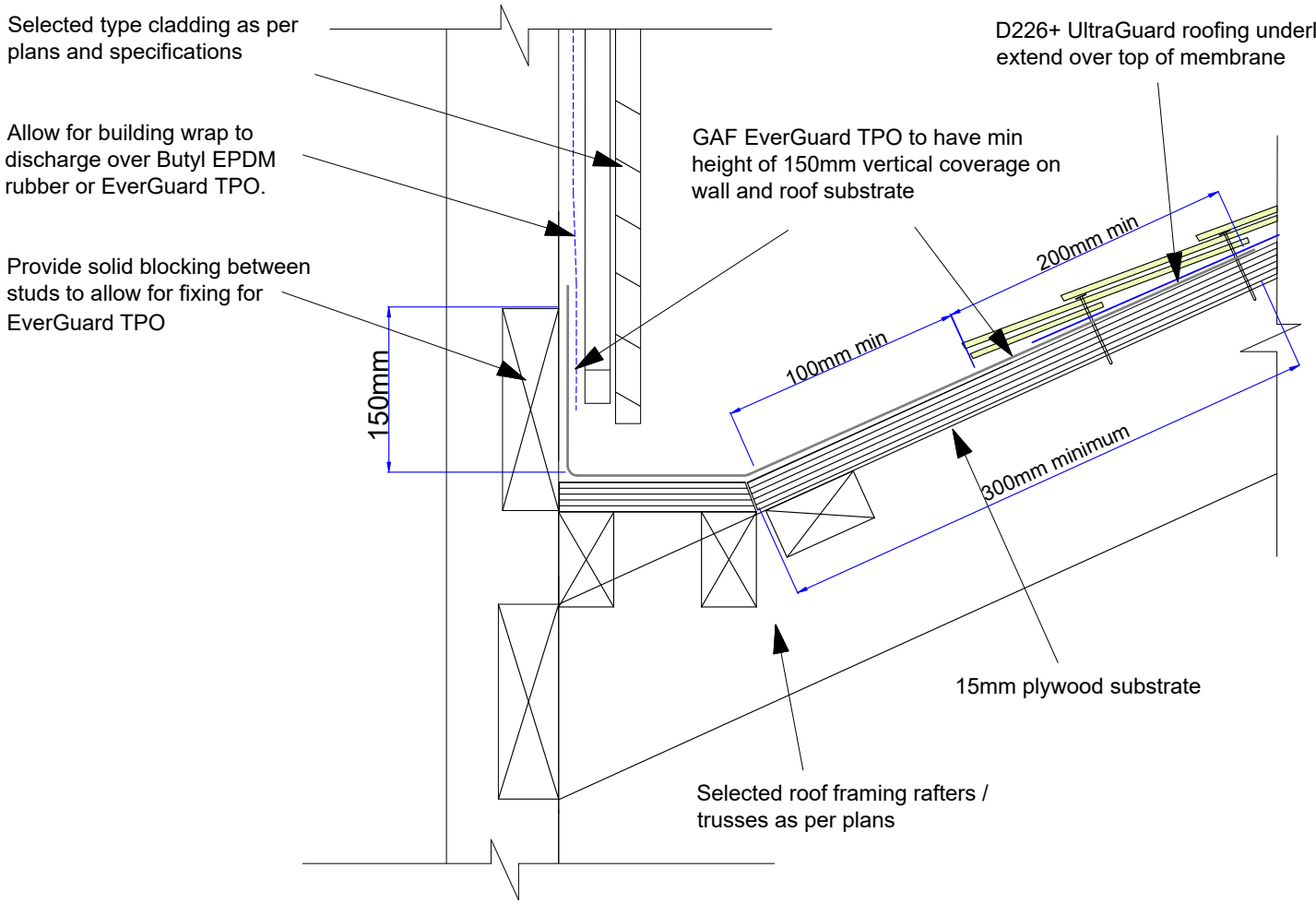
REF:	Date:	Version:
S-108B	05/07/2018	A



SHINGLE ROOF SLOPE TO WALL

Scale: N.T.S.

Notes:
Membrane must not be punctured below 150mm level

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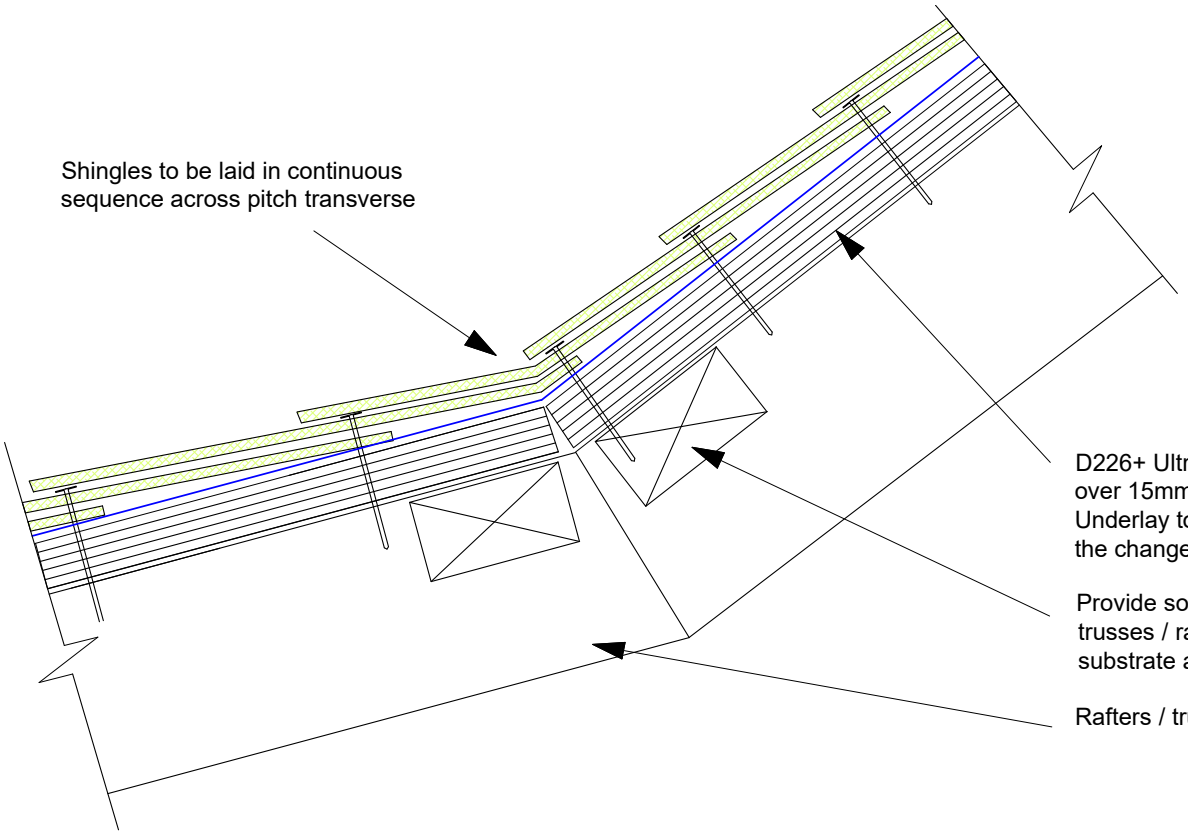
REF: S-109	Date: 05/07/2018	Version: A



SHINGLE ROOF PITCH CHANGE

Scale: N.T.S.

Notes:

GAF Shingle Roof Systems

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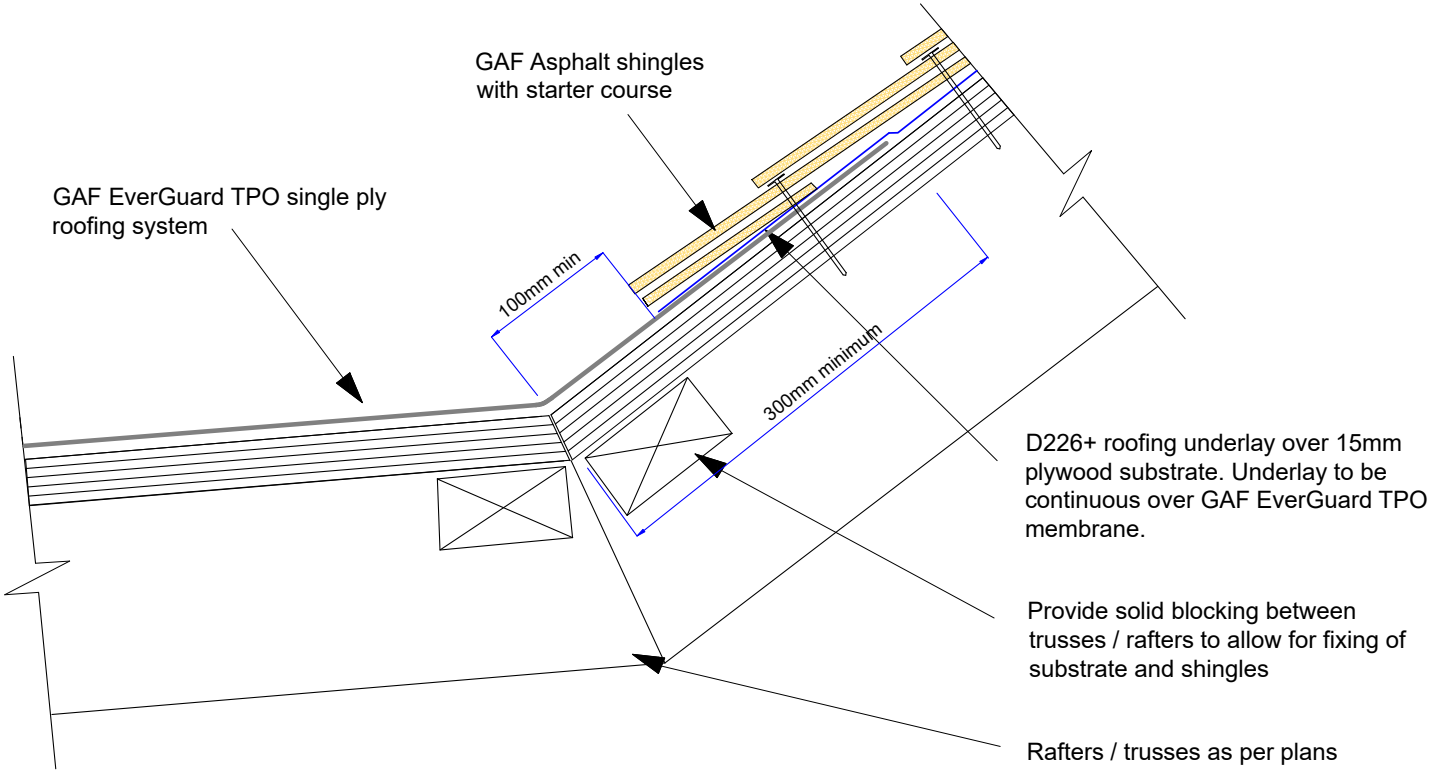
REF:	Date:	Version:
S-110	05/07/2018	A



Notes:
Membrane must not be punctured below 150mm level

SHINGLE ROOF MEMBRANE TRANSITION

Scale: N.T.S.

GAF Shingle Roof Systems

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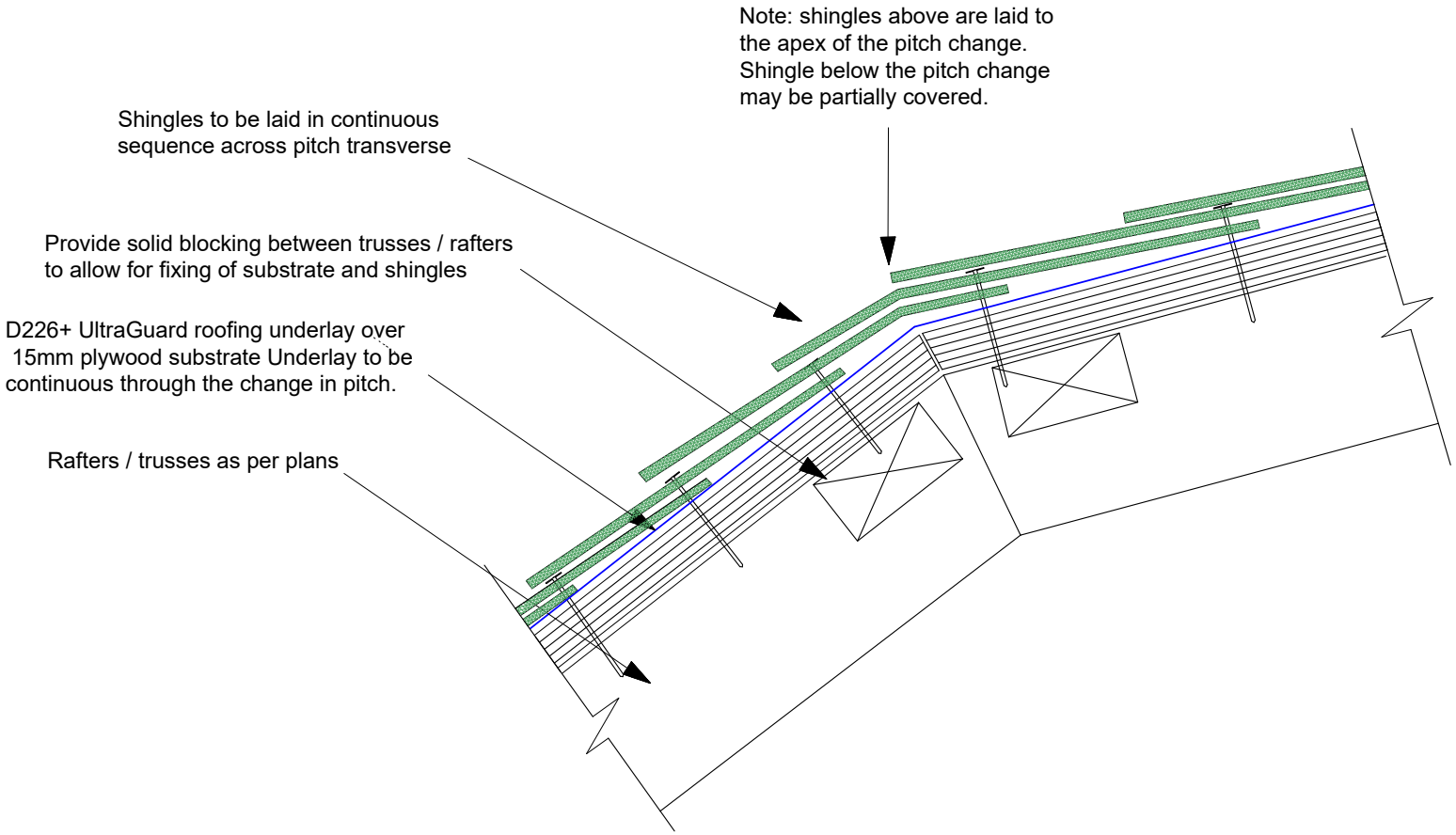
REF:	Date:	Version:
S-110B	05/07/2018	A



SHINGLE ROOF PITCH CHANGE - MANSARD

Scale: N.T.S.

Notes:

GAF Shingle Roof Systems

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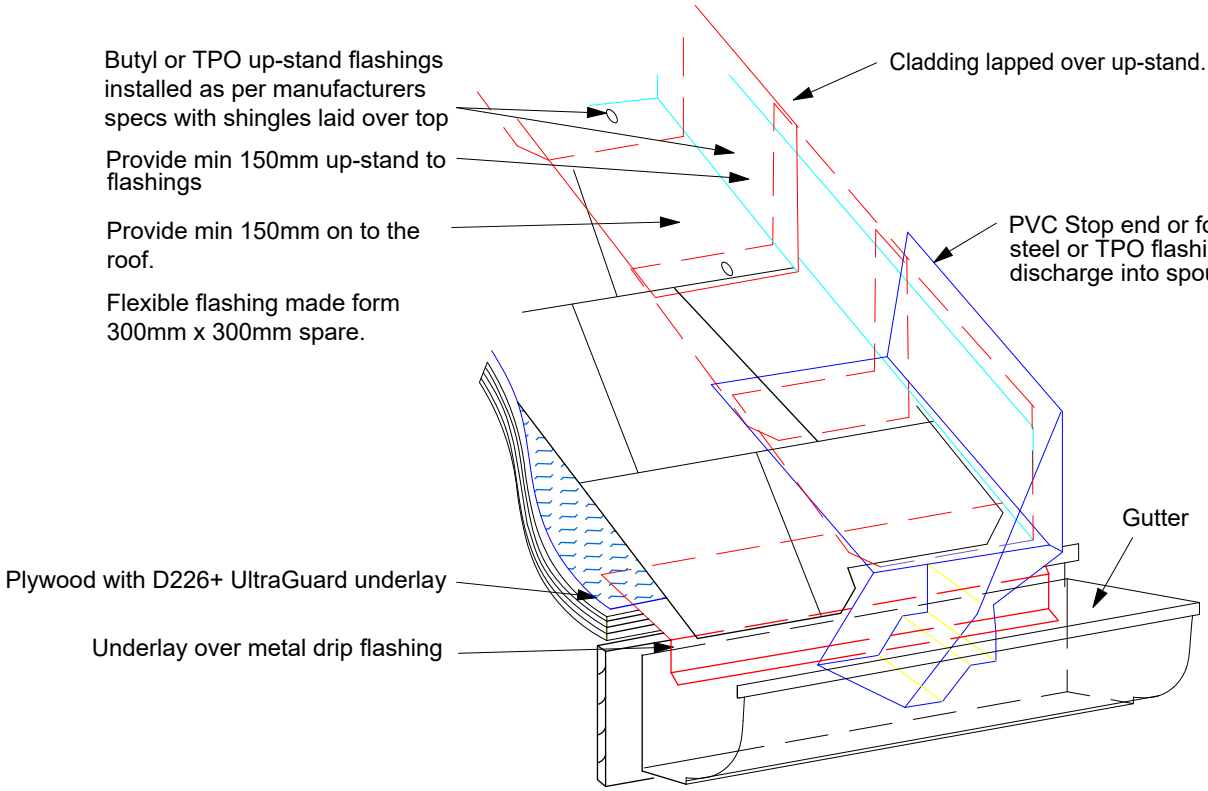
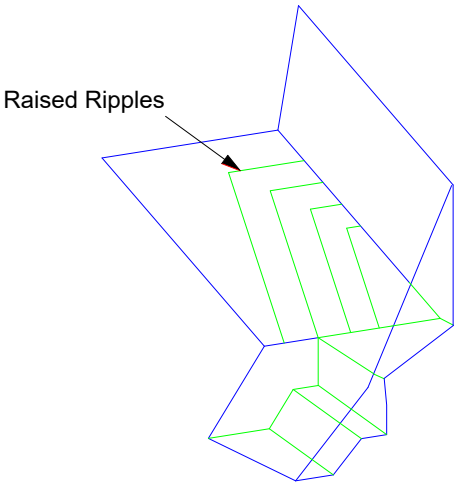
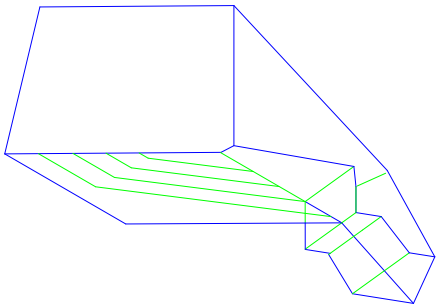
Drawing Title: GAF Asphalt Shingle Roofing

REF:	Date:	Version:
S-110C	05/07/2018	A







SHINGLE ROOF PVC STOP END FLASHING

Scale: N.T.S.

Notes:
PVC stopend flashing come in a verity of pre-molded shapes and perform the same function.

For thicker cladding such at brick, the PVC stopend may not be suitable and instead can be formed from TPO of steel onsite

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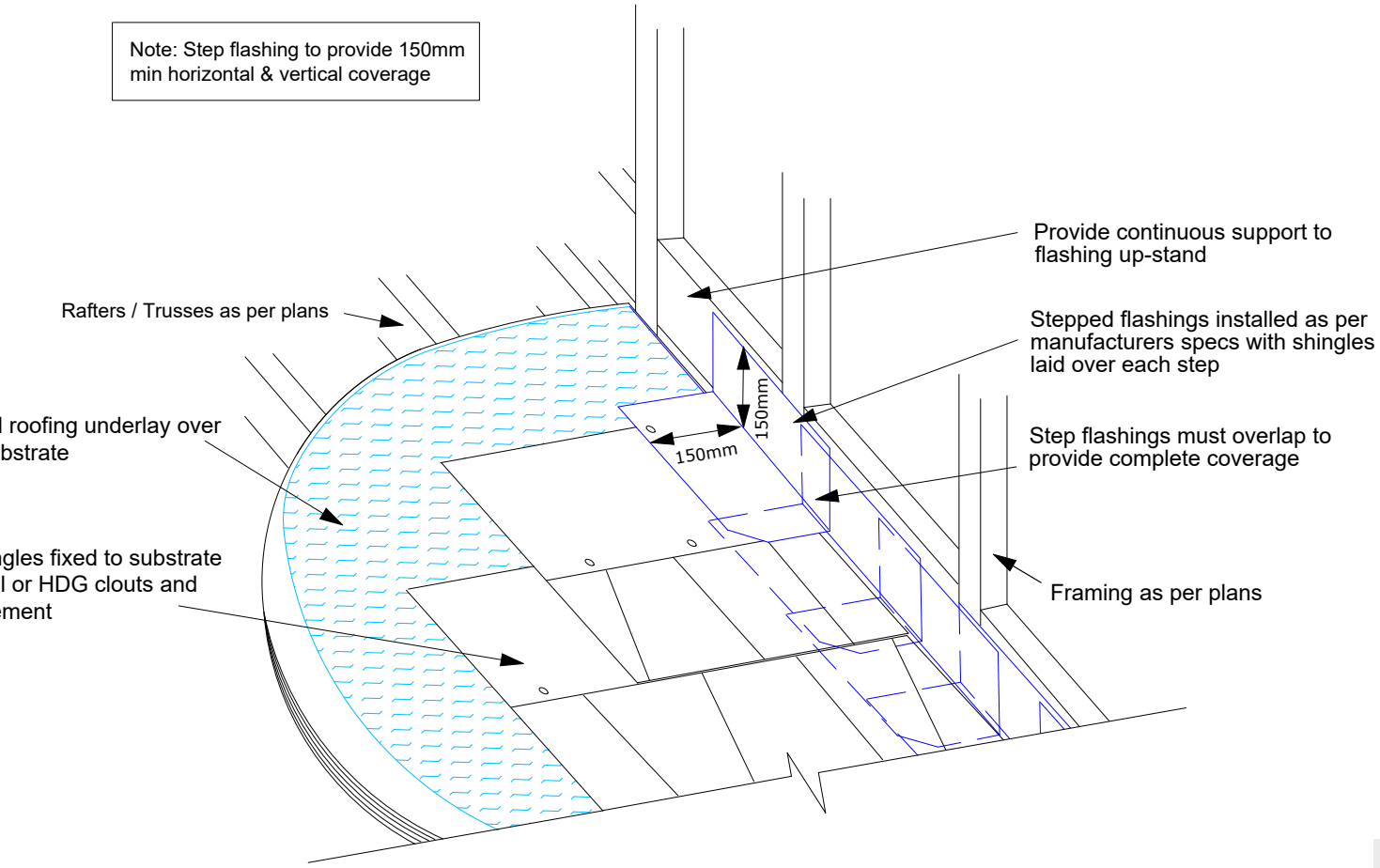
Drawing Title: GAF Asphalt Shingle Roofing

REF:	Date:	Version:
S-111	05/07/2018	A

Note: Step flashing to provide 150mm min horizontal & vertical coverage



SHINGLE ROOF STEP FLASHING

Scale: N.T.S.

Notes:

Step flashings are formed from Butyl or EPDM Rubber or TPO membrane sheet, 300mm x 300mm square.

Step flashings are fixed with shingle nails to the wall and plywood deck.

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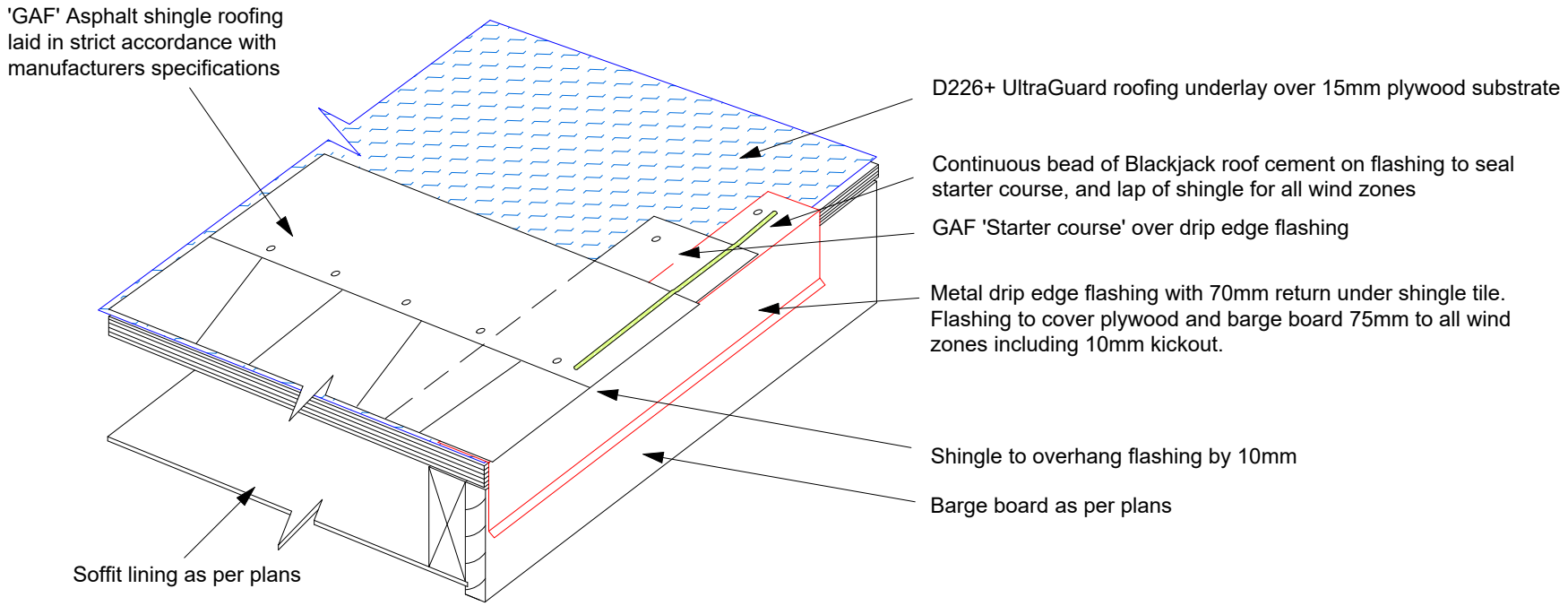
Drawing Title: GAF Asphalt Shingle Roofing

REF:	Date:	Version:
S-112	05/07/2018	A



SHINGLE ROOF BARGE END

Scale: N.T.S.

Notes:
Any gaps between the plywood and barge board greater than 10mm require a 100mm deep flashing to cover the barge board and gap between the plywood.

Alternatively suitable seam tape, GAF WeatherWatch or window tape or GAF Seam tape to seal plywood to barge junction.

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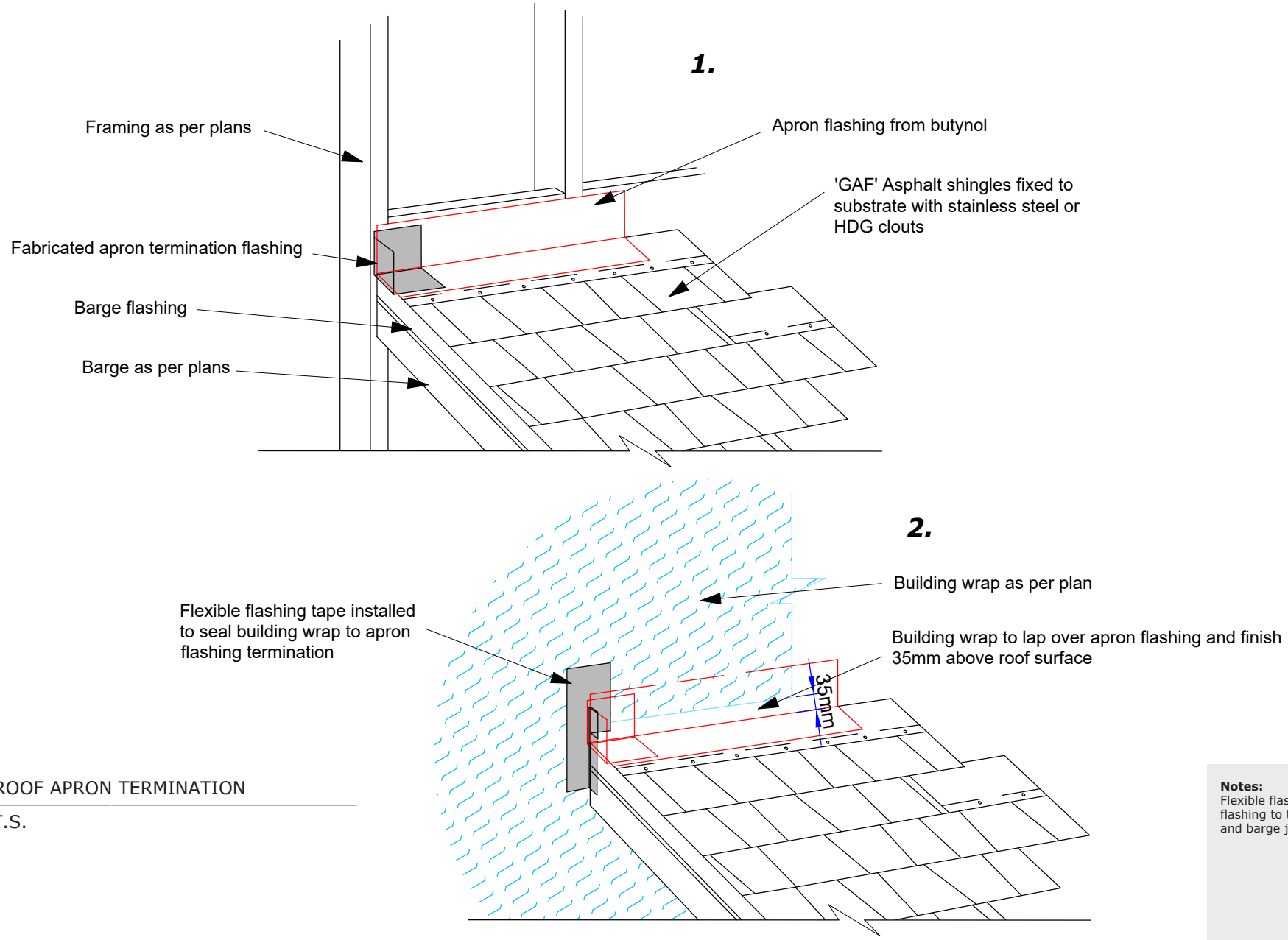
Drawing Title: GAF Asphalt Shingle Roofing

REF:	Date:	Version:
S-113	05/07/2018	A



SHINGLE ROOF APRON TERMINATION

Scale: N.T.S.

Notes:
Flexible flashing tape forms a back flashing to the apron termination and barge junction area.

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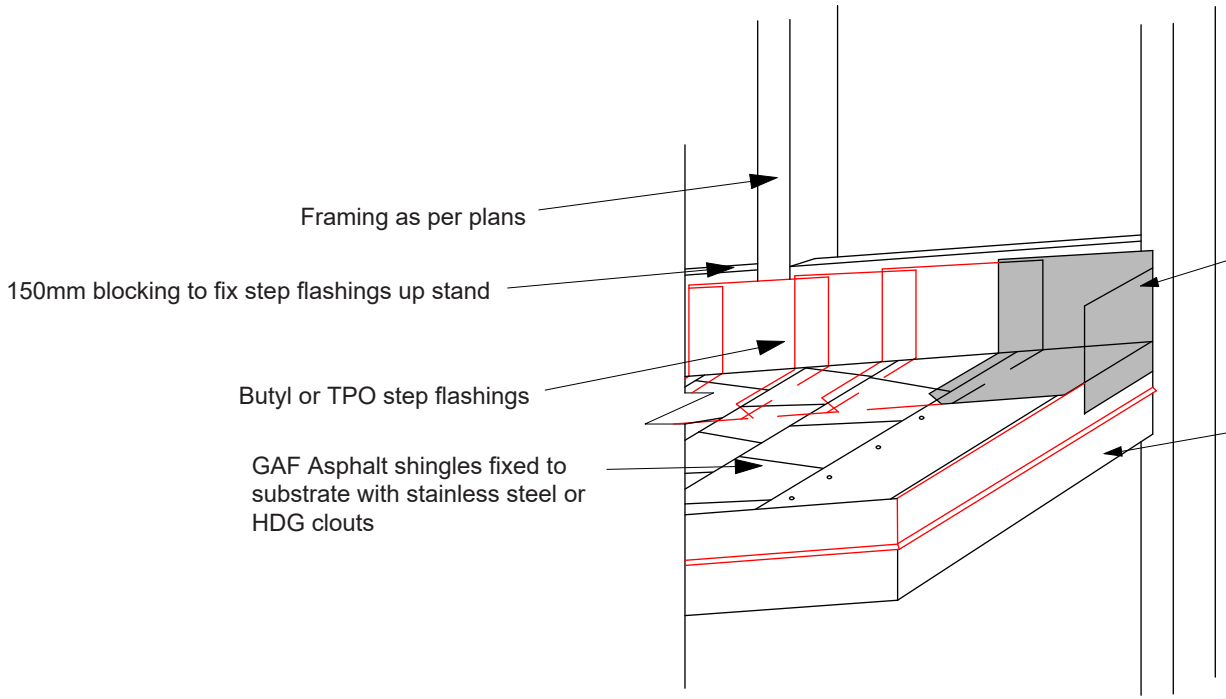
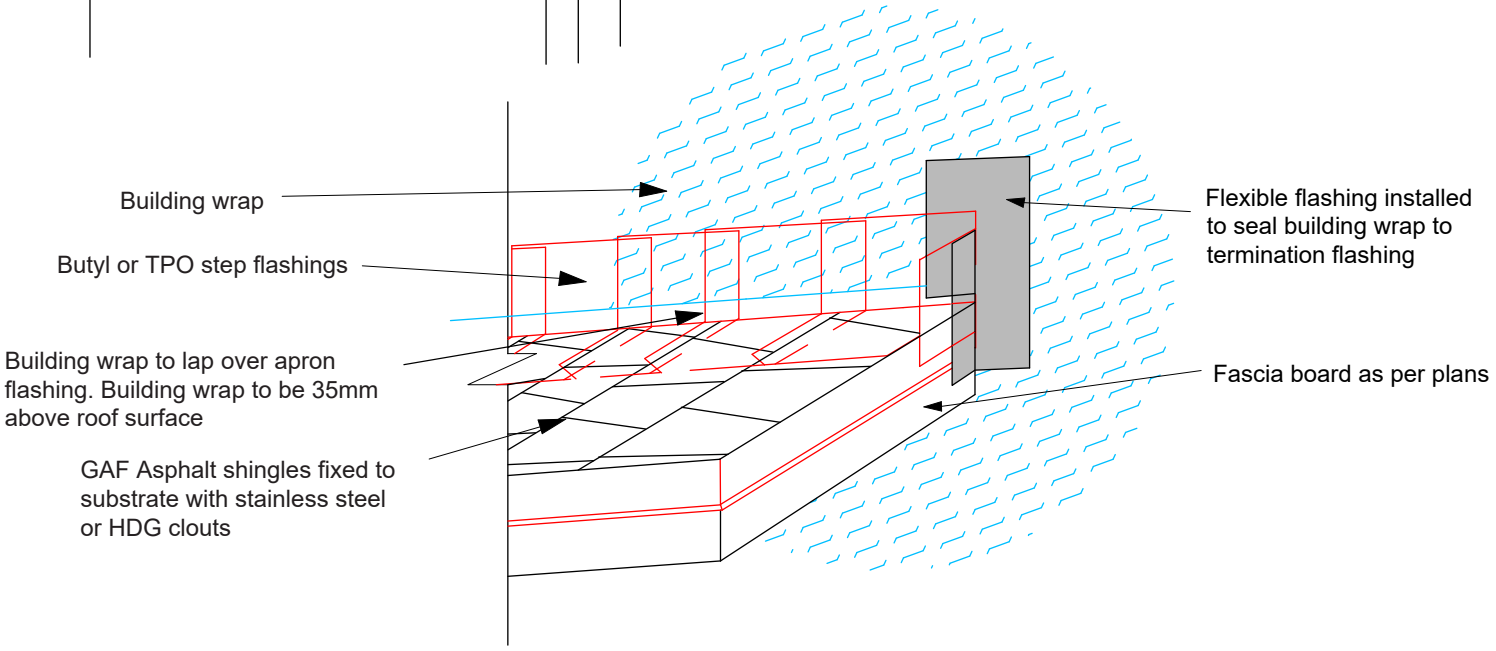
REF: S-114	Date: 05/07/2018	Version: A





Notes:
Flexible flashing tape forms a back flashing to the apron termination and barge junction area.

SHINGLE ROOF KICK OUT FLASHING

Scale: N.T.S.

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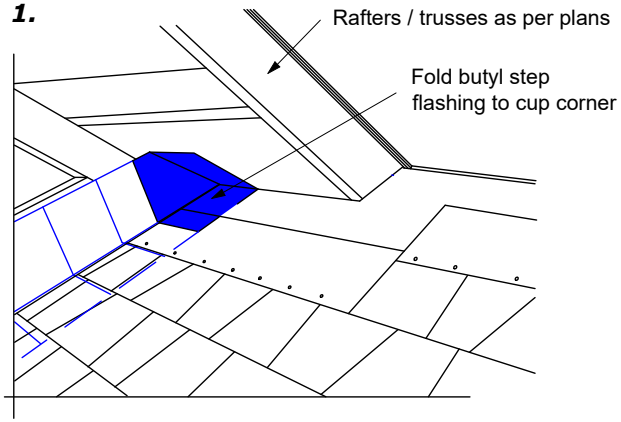
1.



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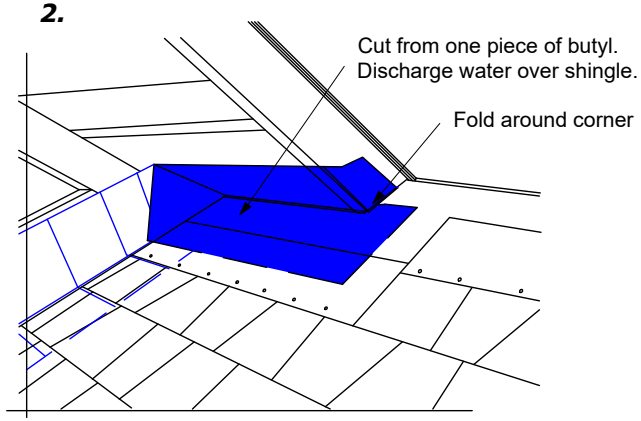
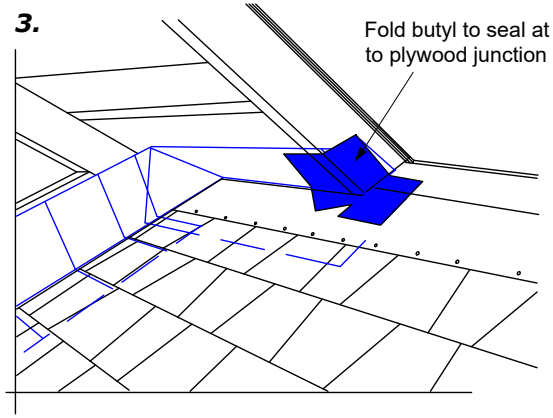


Notes:

Step flashings and apron flashings are formed from Butyl or EPDM Rubber or TPO membrane sheet.

3.



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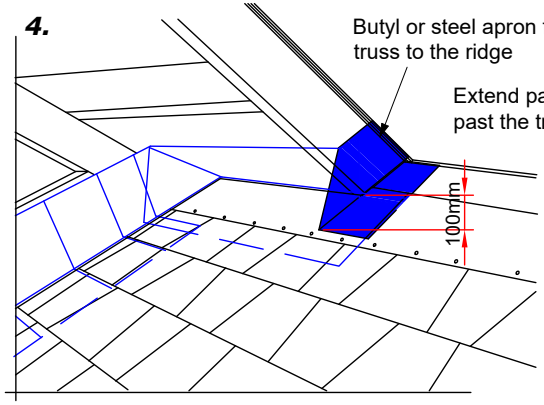

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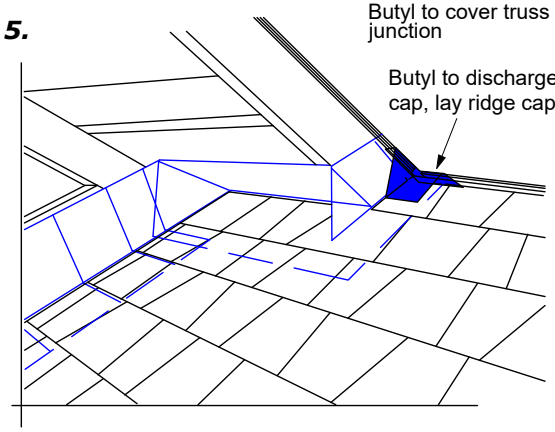

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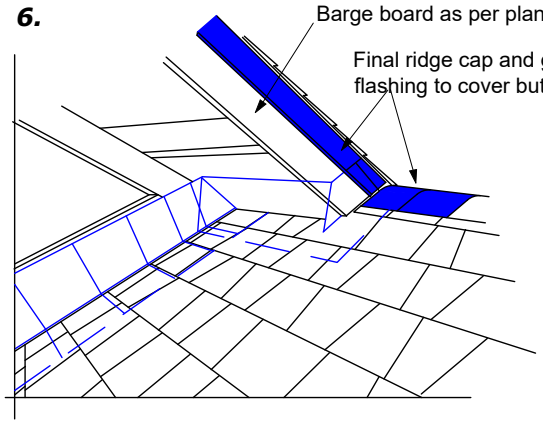

SHINGLE ROOF GABLE TO RIDGE

Scale: N.T.S.

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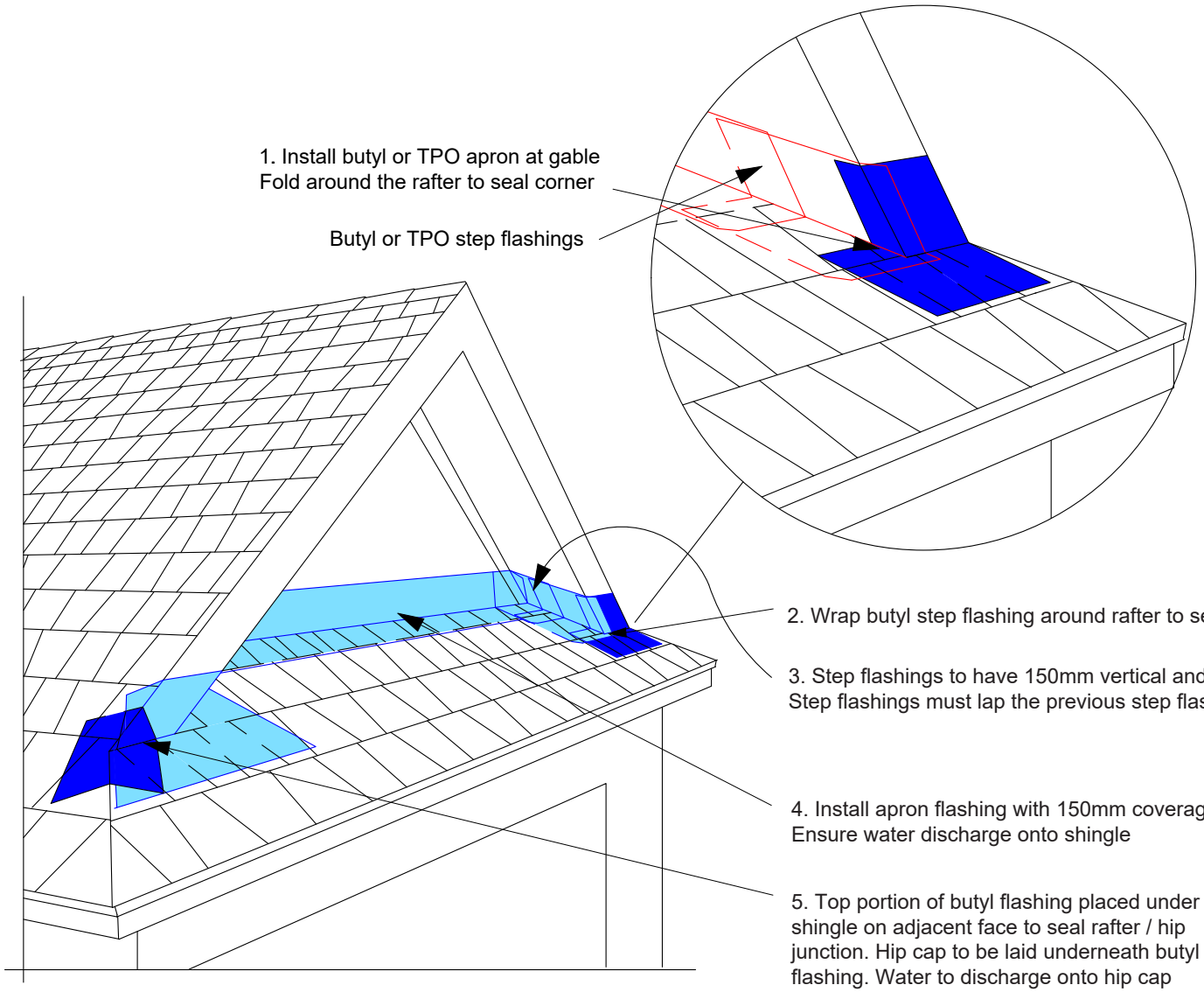
S-116	05/07/2018	A



SHINGLE ROOF DUTCH DROMER GABLE

Scale: N.T.S.

Notes:

Step flashings are formed from Butyl or EPDM Rubber or TPO membrane sheet.

Step flashings are fixed with shingle nails to the wall and plywood deck.

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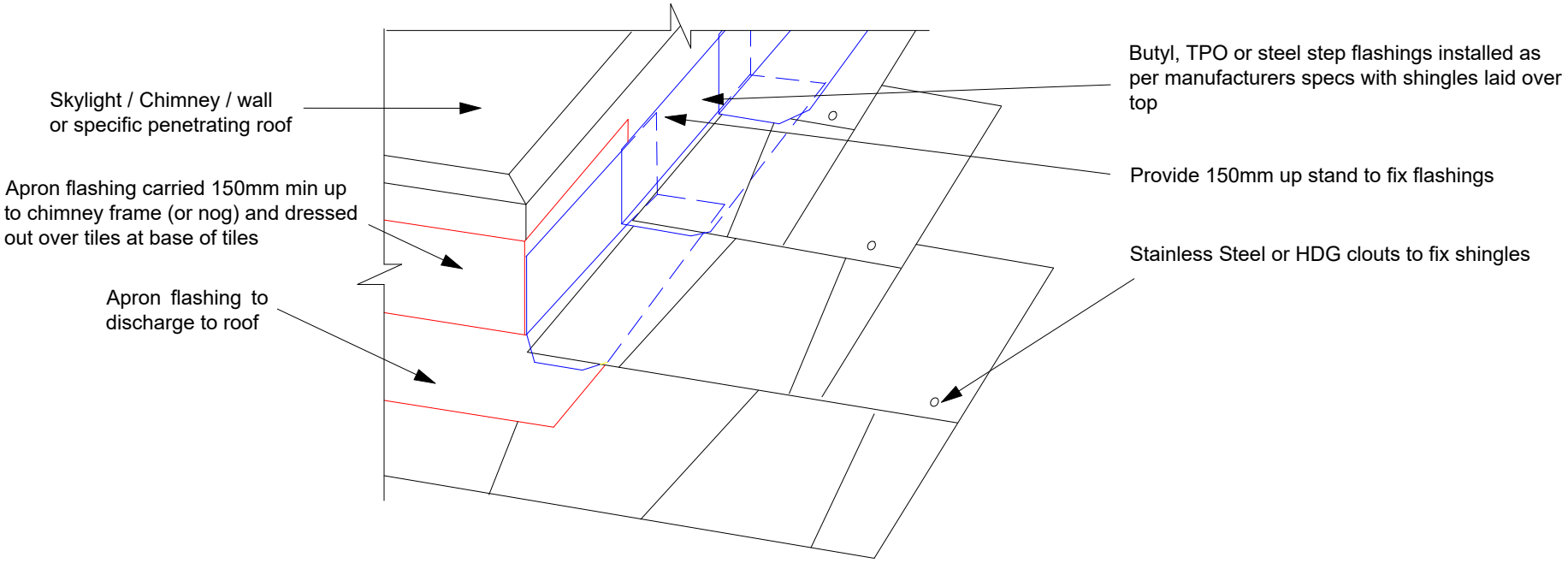

SHINGLE ROOF SPECIFIC PENETRATION

Scale: N.T.S.

Notes:

Step flashings are formed from Butyl or EPDM Rubber or TPO membrane sheet, 300mm x 300mm square.

Step flashings are fixed with shingle nails to the wall and plywood deck.

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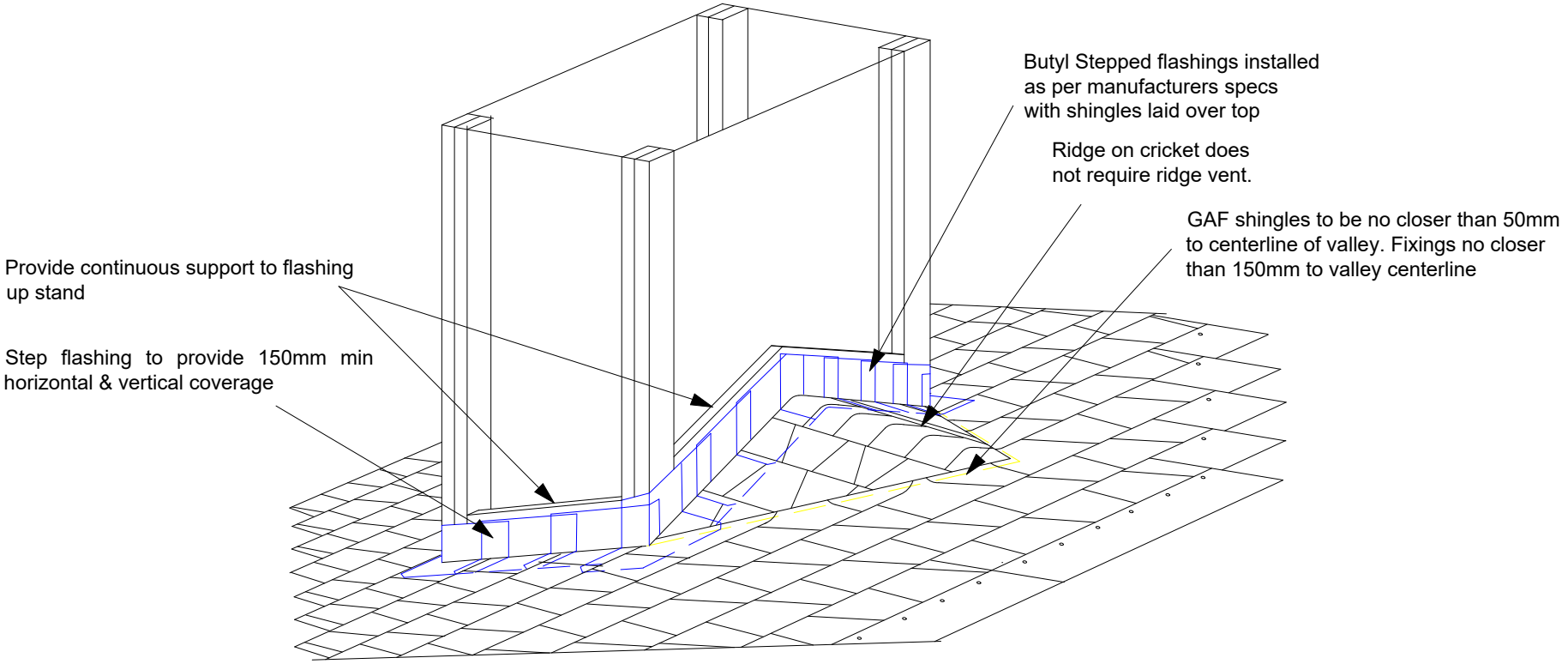

SHINGLE ROOF CHIMNEY CRICKET

Scale: N.T.S.

Notes:

Step flashings are formed from Butyl or EPDM Rubber or TPO membrane sheet, 300mm x 300mm square.

Step flashings are fixed with shingle nails to the wall and plywood deck.

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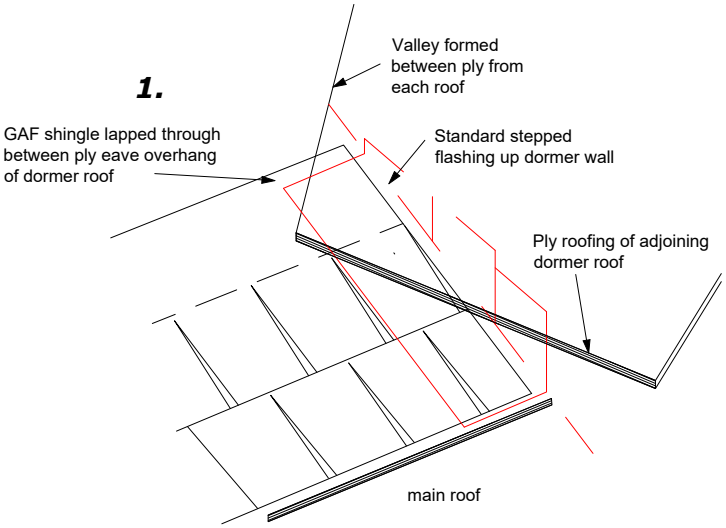

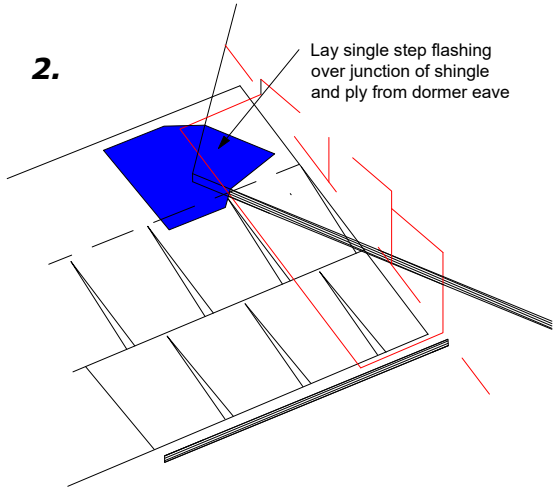

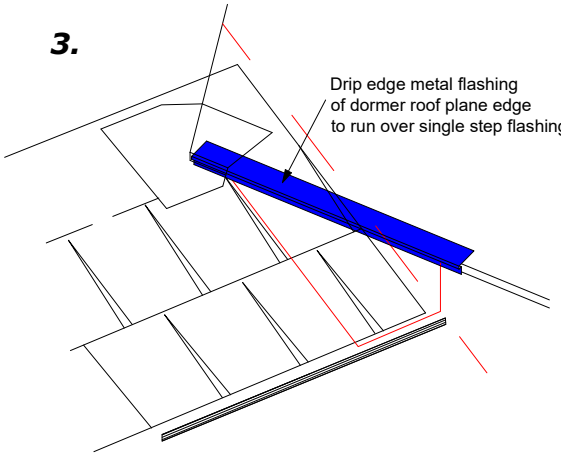

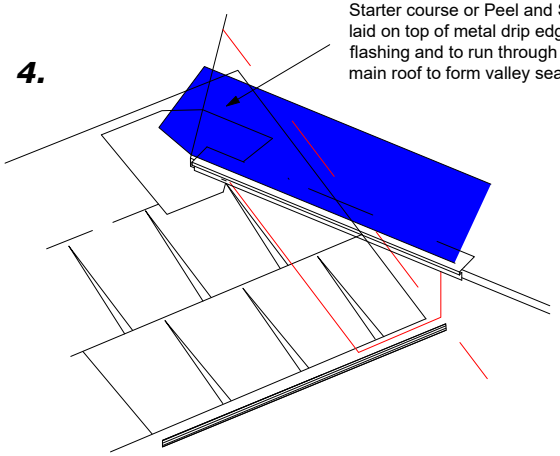

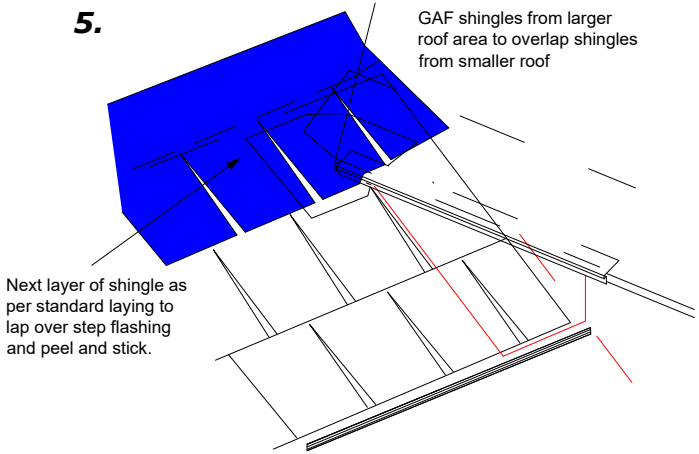

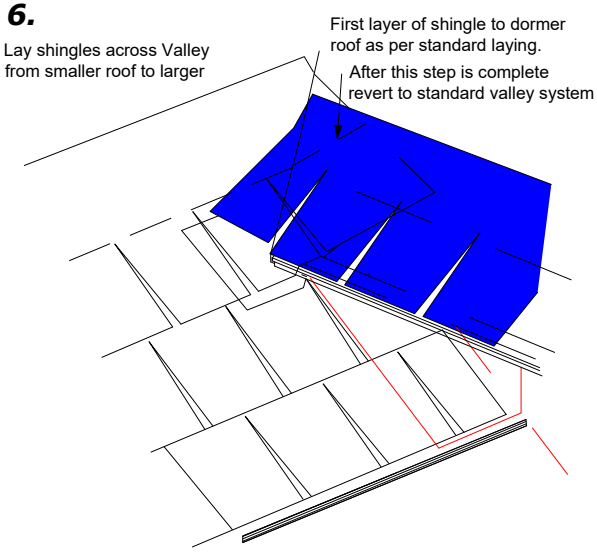

SHINGLE ROOF VALLEY TO DORMER

Scale: N.T.S.

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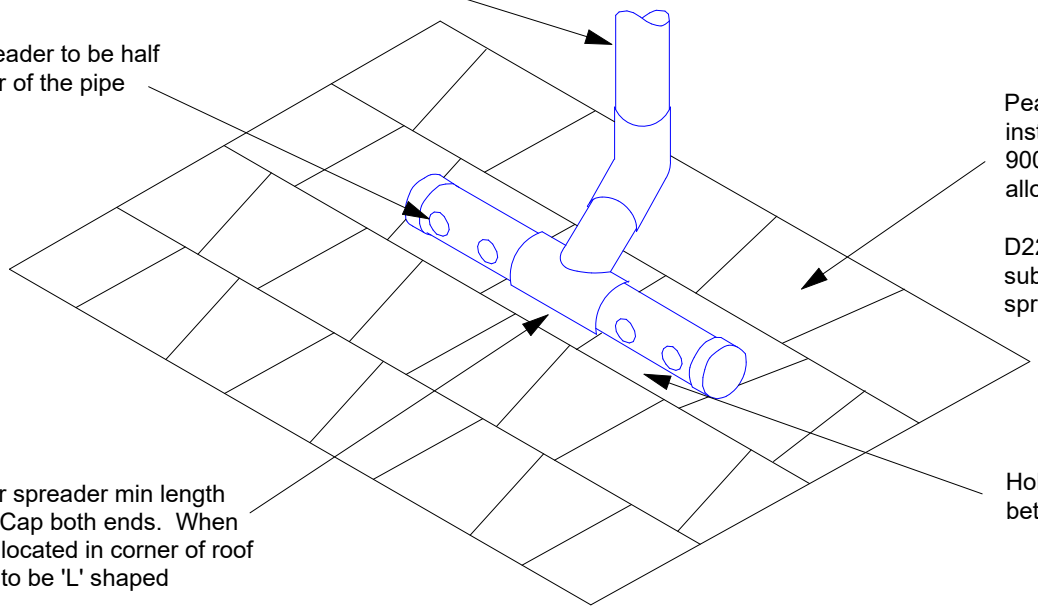
Down pipe spreaders are critical for water discharge onto the shingle roof



SHINGLE ROOF RAIN WATER SPREADER

Scale: N.T.S.

Notes:

MAX 25m2 CATCHMENT PER SPREADER SHALL BE PERMITTED TO DISCHARGE ONTO LOWER ROOF AREA.

DO NOT DISCHARGE OVER SHINGLE JUNCTION.

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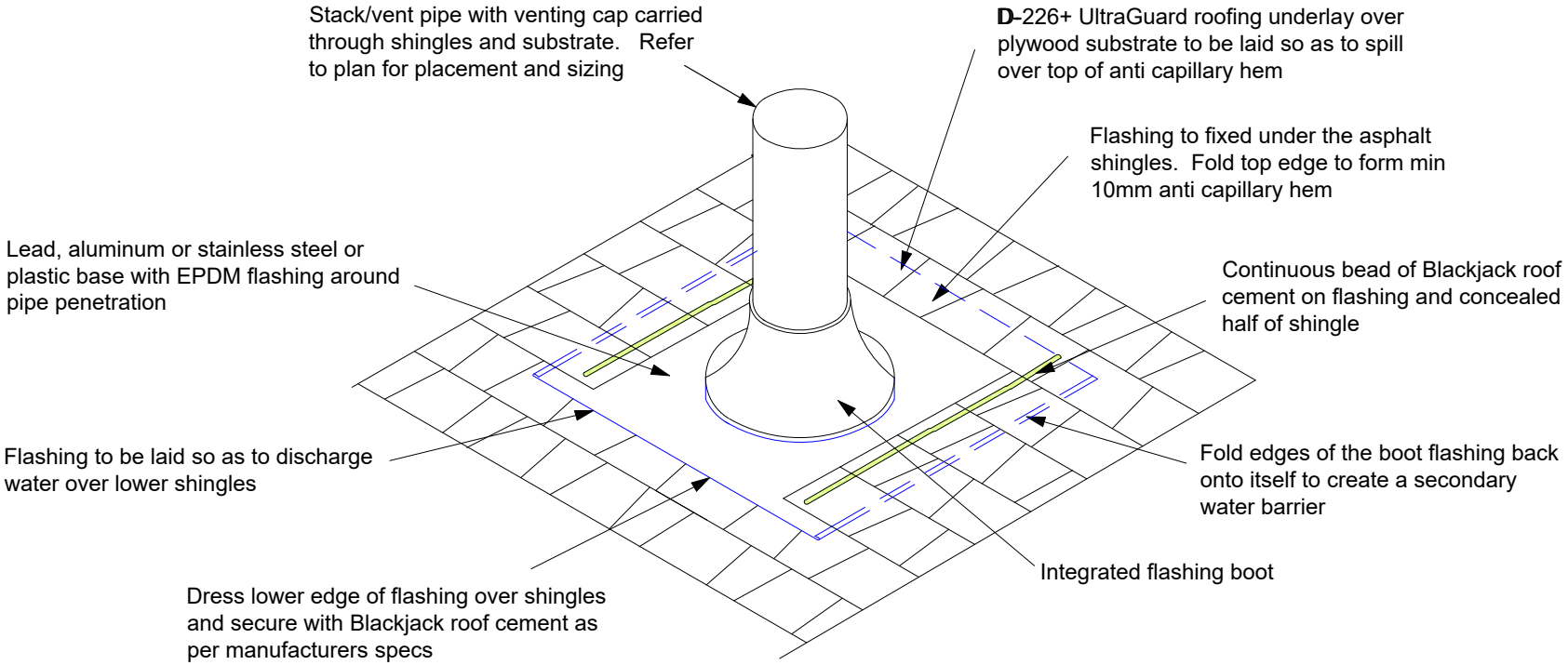

SHINGLE ROOF PIPE PENETRATION

Scale: N.T.S.

Notes:

Pipe flashing with the plastic base may not have a hem or crush return. Use Blackjack to seam edges under tiles.

Recommended:

Install WeatherWatch peal and stick 500mm x 500mm under pipe boot flashing, draining on to tiles below.

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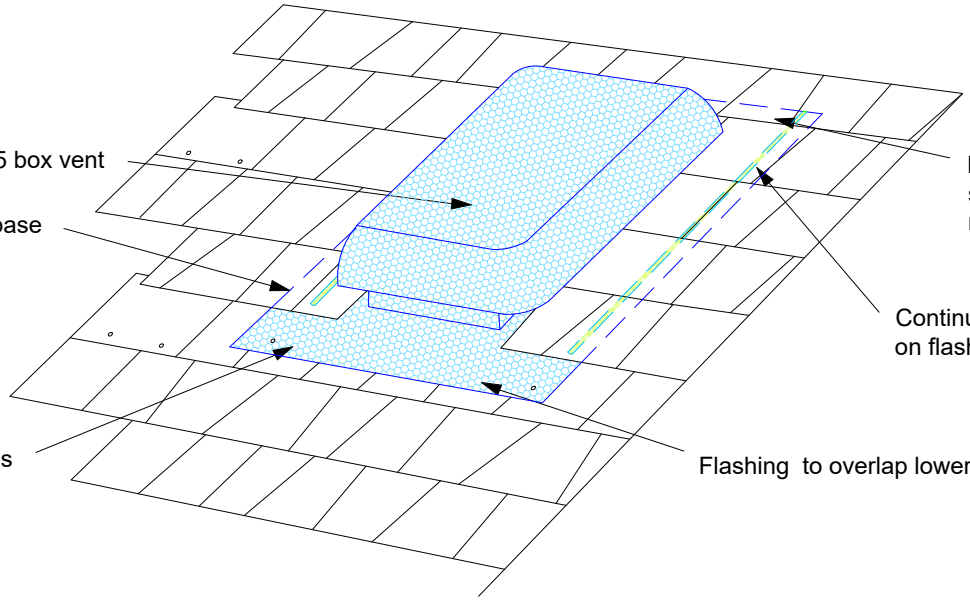
Cut appropriate size opening in underlay and substrate for vent. Refer to included instructions



SHINGLE ROOF MASTER FLOW RT65 BOX VENT

Scale: N.T.S.

Notes:

Install WeatherWatch peal and stick 500mm x 500mm under box vent flashing, draining on to tiles below. Underlay should not block air flow from the vent.

Install one RT-65 box vent per 23.2 square meters of attic floor area.

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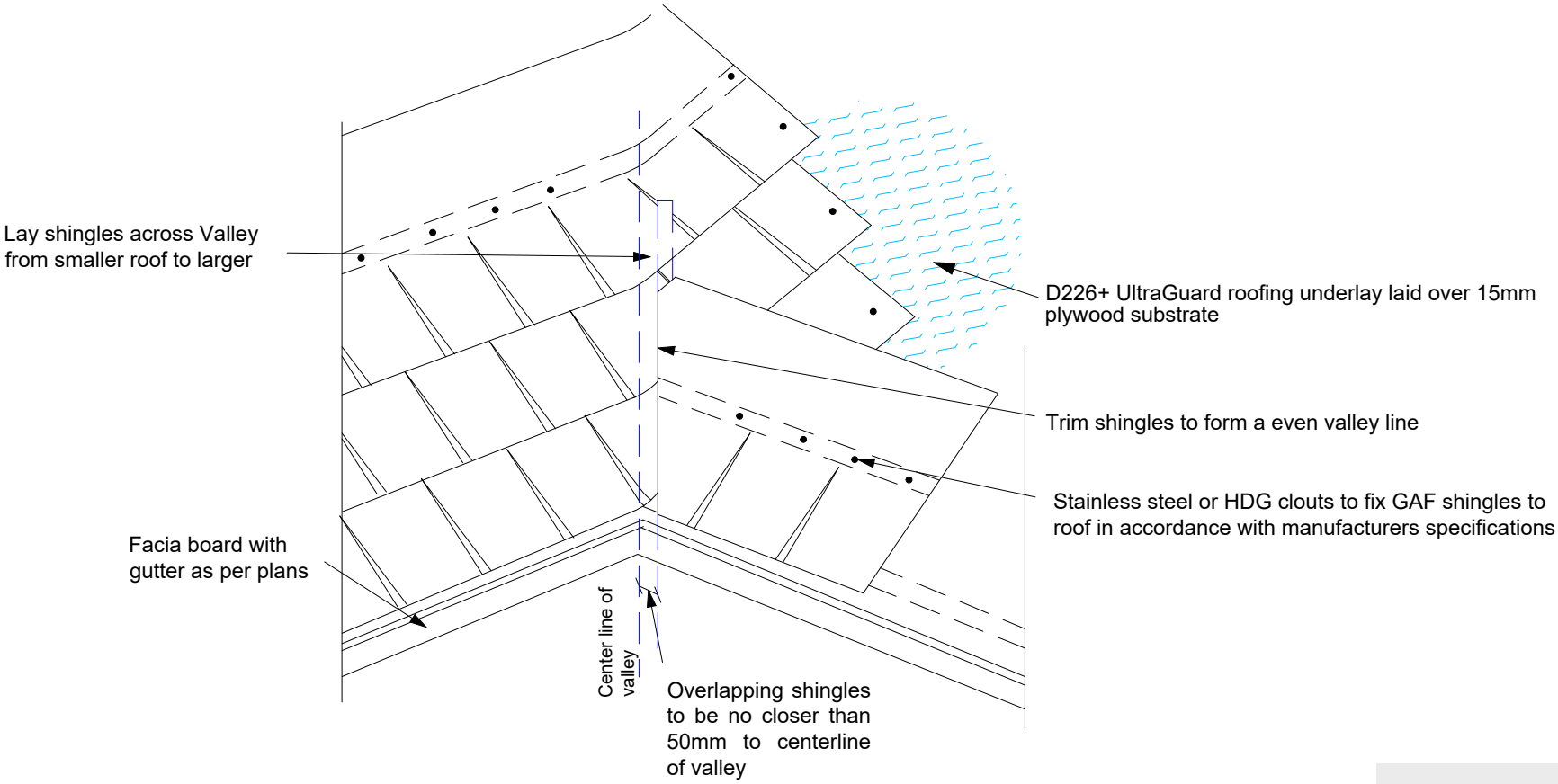

SHINGLE ROOF VALLEY CLADDING

Scale: N.T.S.

Notes:

Install WeatherWatch peal and stick directly to the valley plywood 400mm wide to the length of the valley and centered with 200mm to each ajoining roof face.

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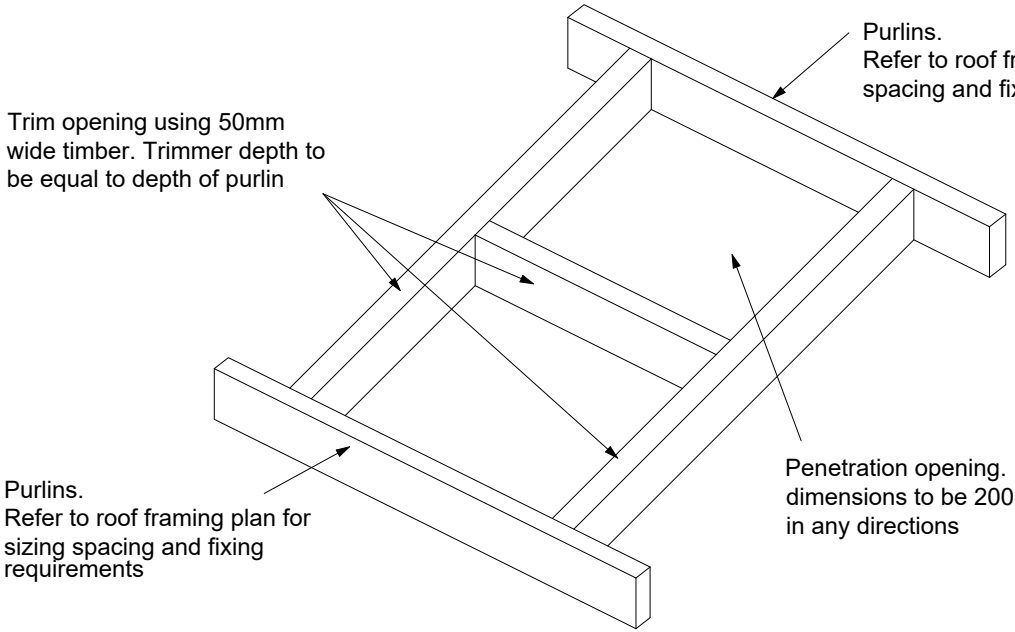

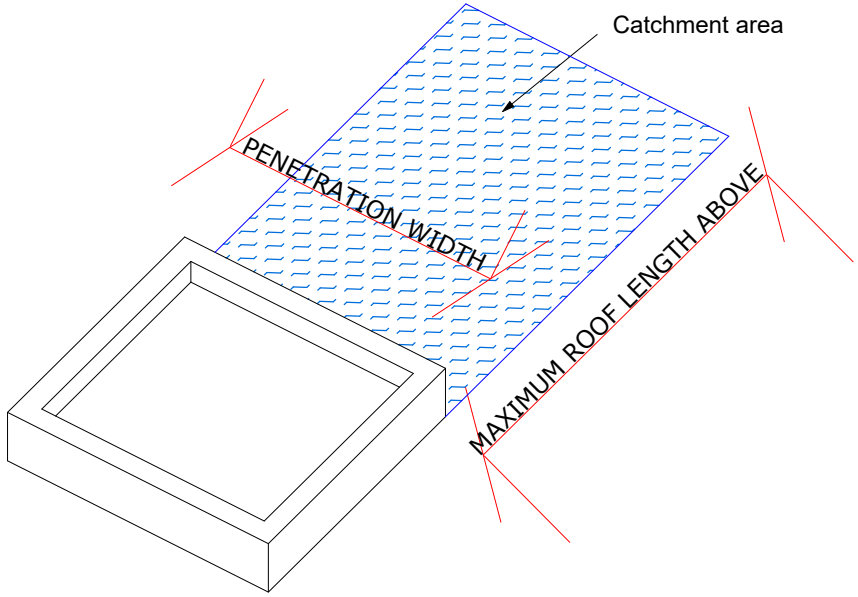

SHINGLE ROOF PENETRATION OPENINGS

Scale: N.T.S.

CATCHMENT AREAS TABLE	
PENETRATION WIDTH	MAX ROOF LENGTH ABOVE PENETRATION
800 TO 1200mm 600 TO 800mm 400 TO 600mm 0 TO 400mm	4m 6m 8m 10m

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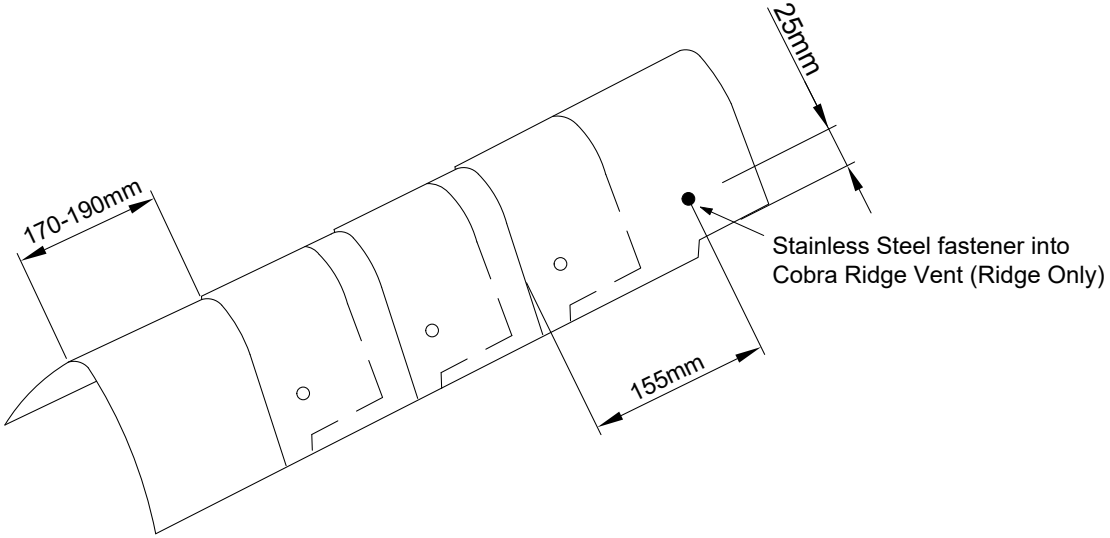

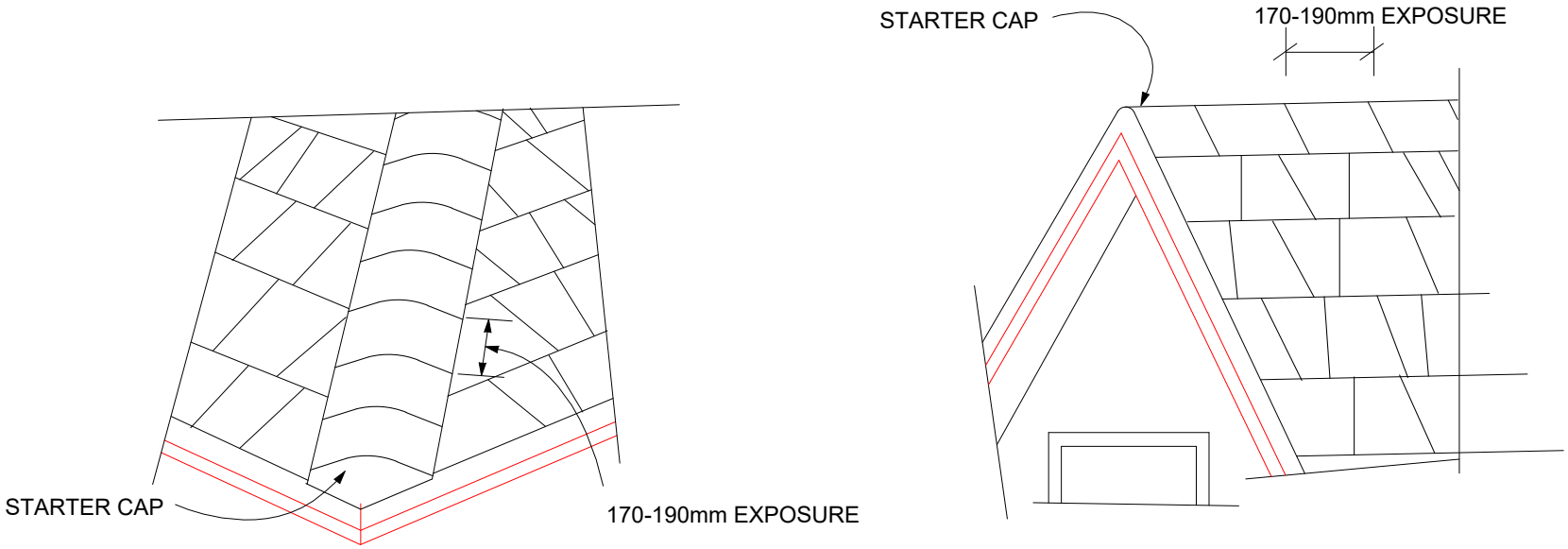

SHINGLE ROOF HIP & RIDGE CAP

Scale: N.T.S.

Notes:

The exposure area for the hip and ridge cap may vary according to the type of cap system.

Follow the individual instructions for each type cap system.

GAF Shingle Roof Systems

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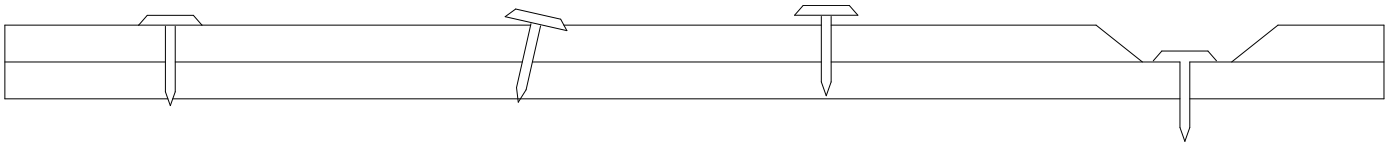

CORRECT	CROOKED	UNDERDRIVEN	OVERDRIVEN
Head flush to shingle. Nail head perpendicular to shingle during driving.	Decreased holding, shingle torn. Prevents next shingle from sealing SEE REPAIR NOTE 1	Decreased holding, puncture shingle above. Prevents next shingle from sealing SEE REPAIR NOTE 1	Decreased holding, shingle torn SEE REPAIR NOTE 2

REPAIR NOTE 1:
FLATTEN NAIL HEAD TO PREVENT INTERFERENCE WITH SHINGLE ABOVE

REPAIR NOTE 2:
DRIVE ANOTHER NEARBY NAIL AS REQUIRED. SEAL OVERDRIVEN NAIL WITH 'BLACK JACK' CEMENT

FASTENERS

While nailing is the preferred method for fixing raised roof profile shingles, GAF accept fastening methods in accordance with GAF specifications.

Shingle nails - stainless steel or compliant hot-dip galvanized gun nails for nailing roof shingles, semi ring shank, in lengths of 25 or 32 mm and having a minimum 3 mm diameter shank with a 9 mm diameter head.

Plywood nails - ring shank, galvanized, flooring grade nails 64 mm long having a minimum 3 mm diameter ring shank with 7 x 5 mm ‘D’ head.

NAILS: refer to NZS 3604:2011 section 4.4 for corrosion protection requirements.

In cases where applying shingles to a roof that has an exposed overhang, (new roofs only) 20mm ring shank nails are allowed to be used from the eaves edge to a point up the roof that is past the outside wall line. 25mm ring shank nails are allowed for re-roof.

Always nail through the fastener line.

SHINGLE ROOF FASTENING DETAIL AND REPAIR

Scale: N.T.S.

Notes:

INSTALLATION INSTRUCTIONS for the individual shingle system should be followed.

Instruction for Timberline and Slateline shingle systems are available.

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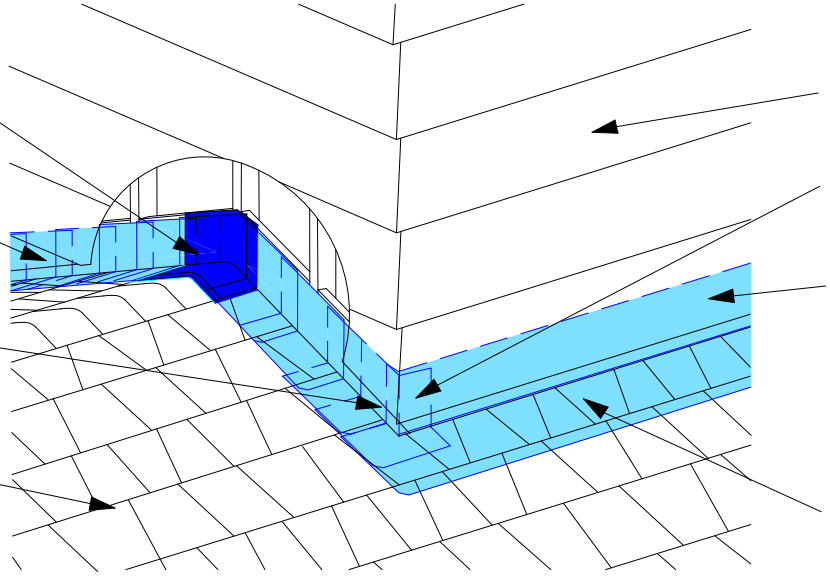

SHINGLE ROOF RIDGE TO WALL

Scale: N.T.S.

Notes:

Building wrap not shown. Building wrap to overlap step flashings and apron flashings.

GAF Shingle Roof Systems

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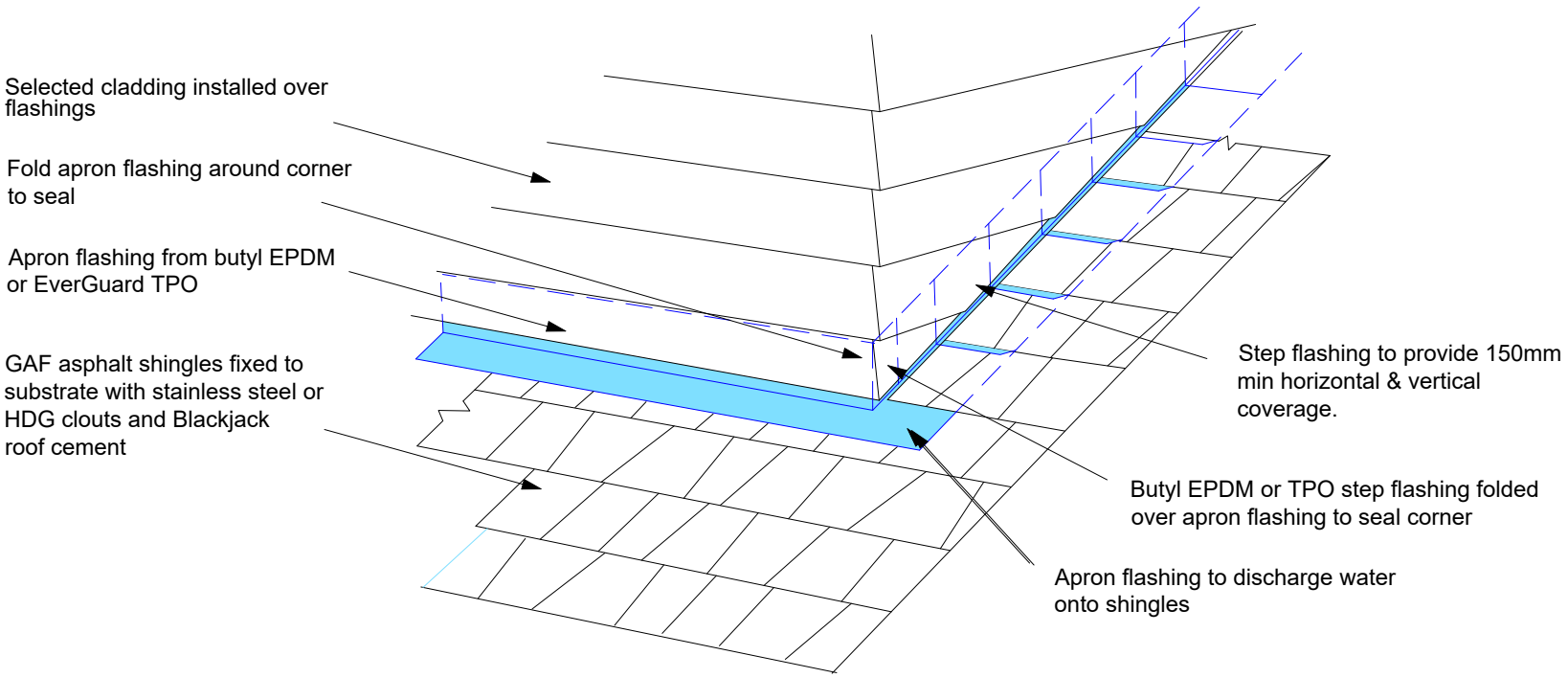

SHINGLE ROOF TO WALL FLASHINGS

Scale: N.T.S.

Notes:

Building wrap not shown. Building wrap to overlap step flashings and apron flashings.

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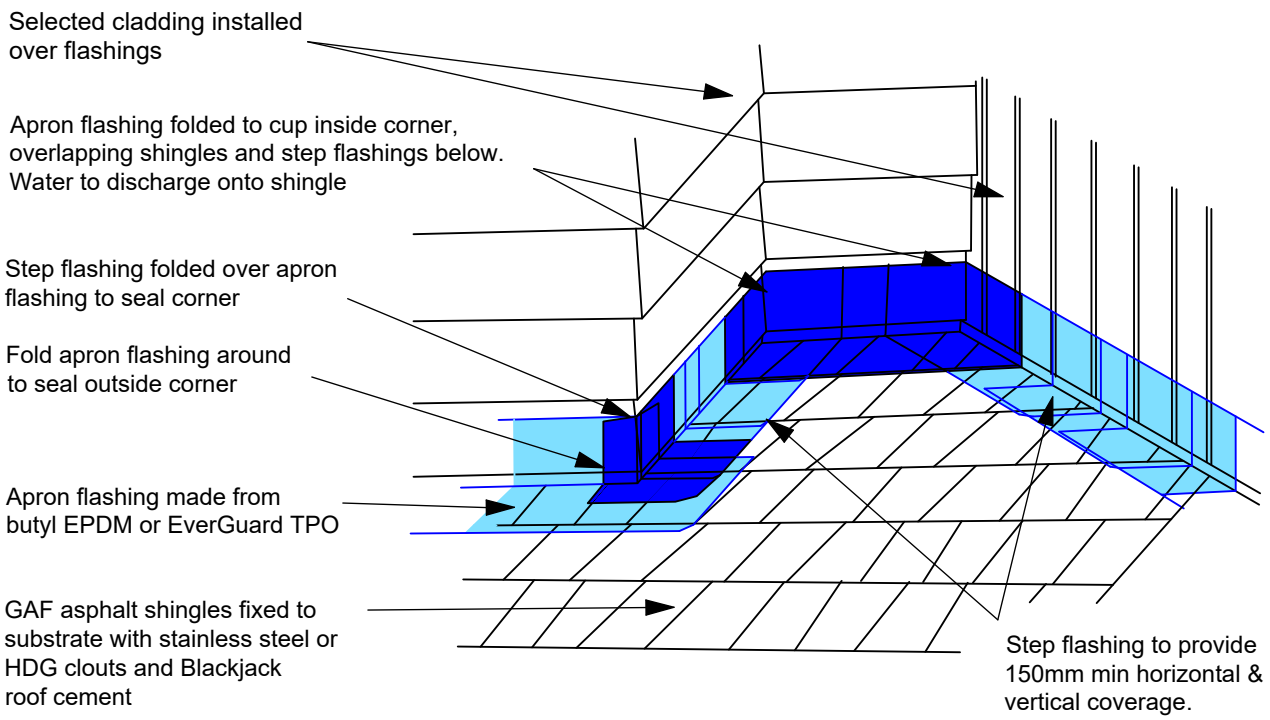

SHINGLE ROOF TO WALL CORNERS

Scale: N.T.S.

Notes:

Building wrap not shown. Building wrap to overlap step flashings and apron flashings.

Both apron flashings and step flashings are made from butyl EPDM or EverGuard TPO.

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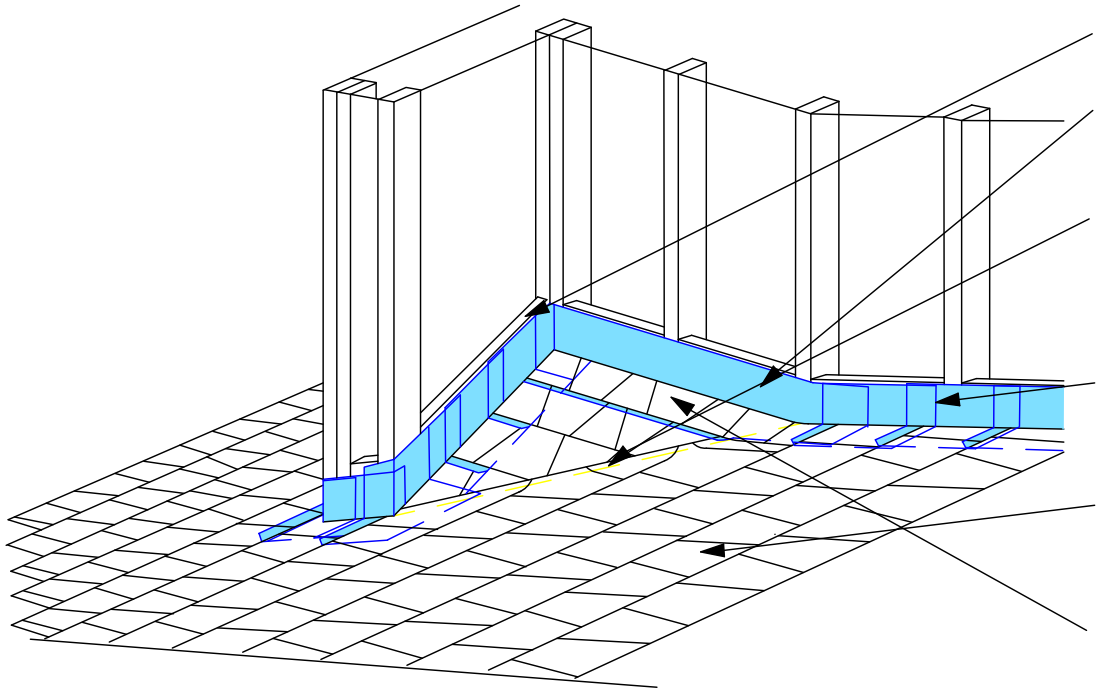

Provide continuous support to flashing upstand

Apron flashing from butyl EPDM or EverGuard TPO. Apron flashing to extend past valley 150mm.

GAF shingles to be no closer than 50mm to center line of valley.

Fixings no closer than 150mm to valley line

Step flashing to provide 150mm min horizontal & vertical coverage.

GAF asphalt shingles fixed to substrate with stainless steel or HDG clouts

For aesthetic purposes, shingle fixed over apron flashing with Blackjack roof cement as per manufacturers specs

Notes:

Building wrap not shown. Building wrap to overlap step flashings and apron flashings.

Both apron flashings and step flashings are made from butyl EPDM or EverGuard TPO.

SHINGLE ROOF INTERNAL VALLEY CRICKET

Scale: N.T.S.

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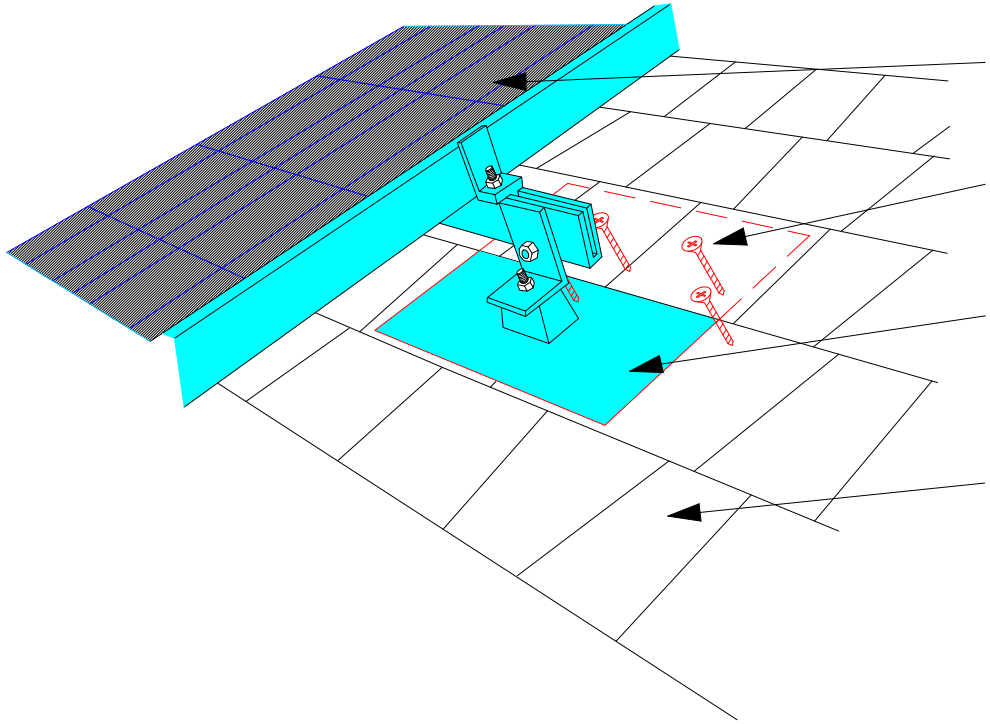

PV Solar panel or other light weight roof mounted item

Counter sunk stainless steel screws, caulked and sealed. Lift shingle to insert screws, do not penetrate top layer of shingle

Typical bracket mount - slide flashing base under top layer of shingles allowing rainwater to run off to shingles below. Seal with Blackjack cement

GAF asphalt shingles fixed to substrate with stainless steel or HDG clouts

Notes:

Do not directly fix any bracket or mount directly to the shingle surface. The shingle system requires a flashing base for the mount.

SHINGLE ROOF PV SOLAR PANEL MOUNT

Scale: N.T.S.

GAF Shingle Roof Systems

UltraGuard Roofing Systems

BRANZ Appraised Appraisal No.529

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Technical Support and Advice:
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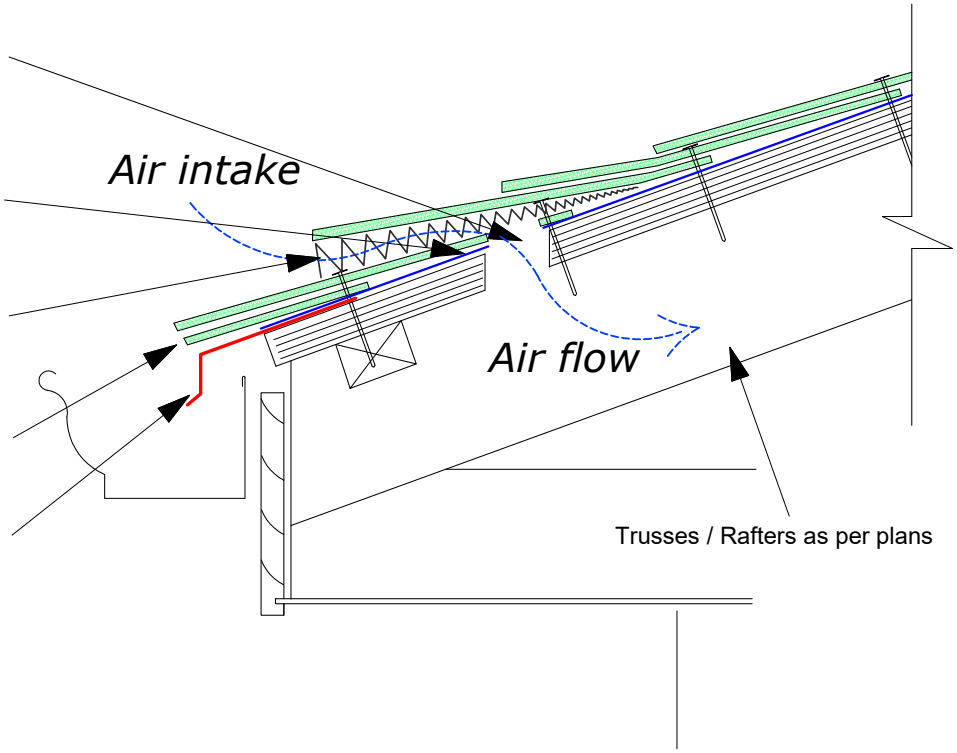
Slots cut in plywood substrate to allow for ventallation. Cobra Intake PRO to be installed over slots, fixed with 45mm clouts

GAF Weatherwatch peel and stick must be used around the air slots

Cobra® IntakePro™ vent system may be used when ventilation at eaves or soffit is inadequate. Minimum roof pitch = 18.5°

Shingles to overhang dripedge flashing min 5mm

Drip edge flashing with min 90mm return and 20mm face with 10mm kick out



SHINGLE ROOF SURFACE INTAKE VENT

Scale: N.T.S.

Notes:

Cobra Intake-Pro must be installed to manufacturer's specifications and installation instructions. GAF WeatherWatch underlay must be used under vent.

Cobra Intake Pro minimum roof pitch = 18.5°

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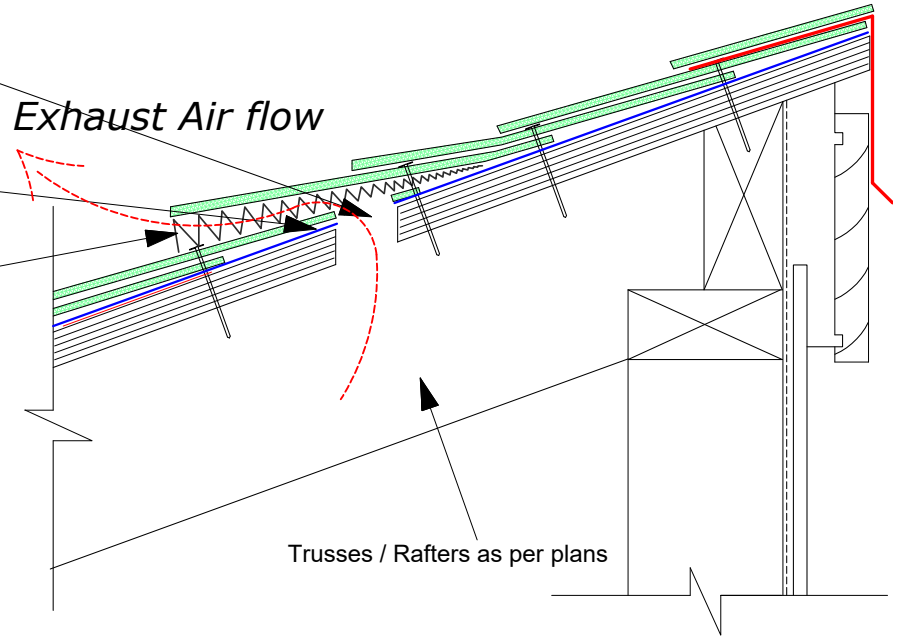
Note: The amount of exhaust ventilation must not exceed the amount of intake ventilation at the soffit or eaves

Slots cut in plywood substrate to allow for ventallation. Cobra Intake PRO to be installed over slots, fixed with 45mm clouts

GAF Weatherwatch peel and stick must be used around the air slots

Cobra® IntakePro™ vent system to be used as an option when ridge venting is inadequate / impracticable.
Minimum roof pitch = 18.5°



SHINGLE ROOF SURFACE EXHAUST VENT

Scale: N.T.S.

Notes:

Cobra Intake-Pro must be installed to manufacturer's specifications and installation instructions. GAF WeatherWatch underlay must be used under vent.

Cobra Intake Pro minimum roof pitch = 18.5°

GAF Shingle Roof Systems

UltraGuard Roofing Systems

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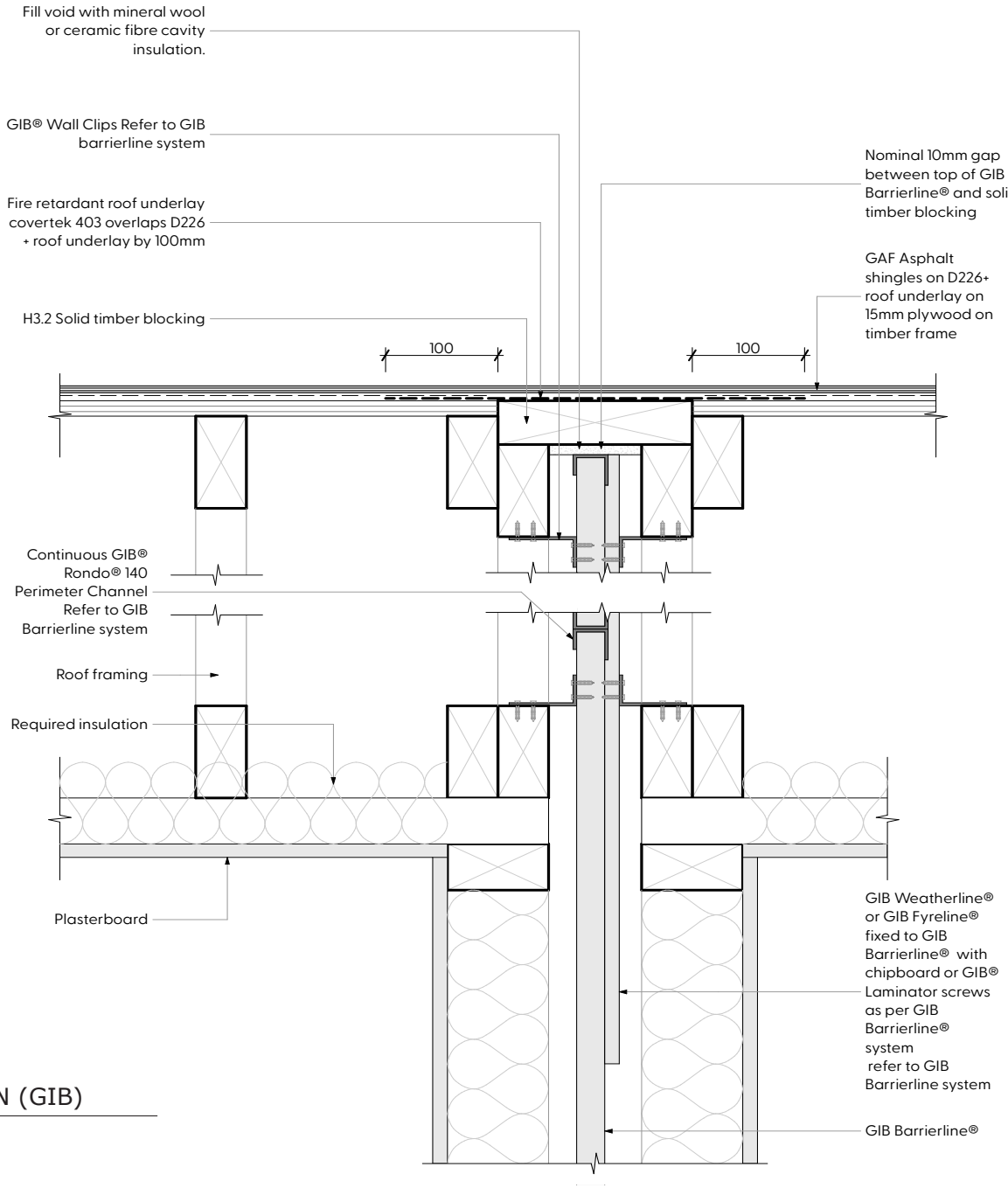

INTERTENANCY ROOF JUNCTION (GIB)

Scale: N.T.S.

Notes:
This detail has been designed by DEASIGNFIRE Architects & Fire Consultants for GAF Shingle systems, BRANZ Appraisal 529.

Detail has been externally reviewed by (GIB) Winstone Wallboards LTD and BRANZ Technical Services.

GAF **Shingle** Roof Systems

BRANZ Appraised
Appraisal No.529 [2022]

Notes: This detail is in accordance with the BRANZ Appraisal certification. Contact us for any required customization.

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REF:	Date:	Version:
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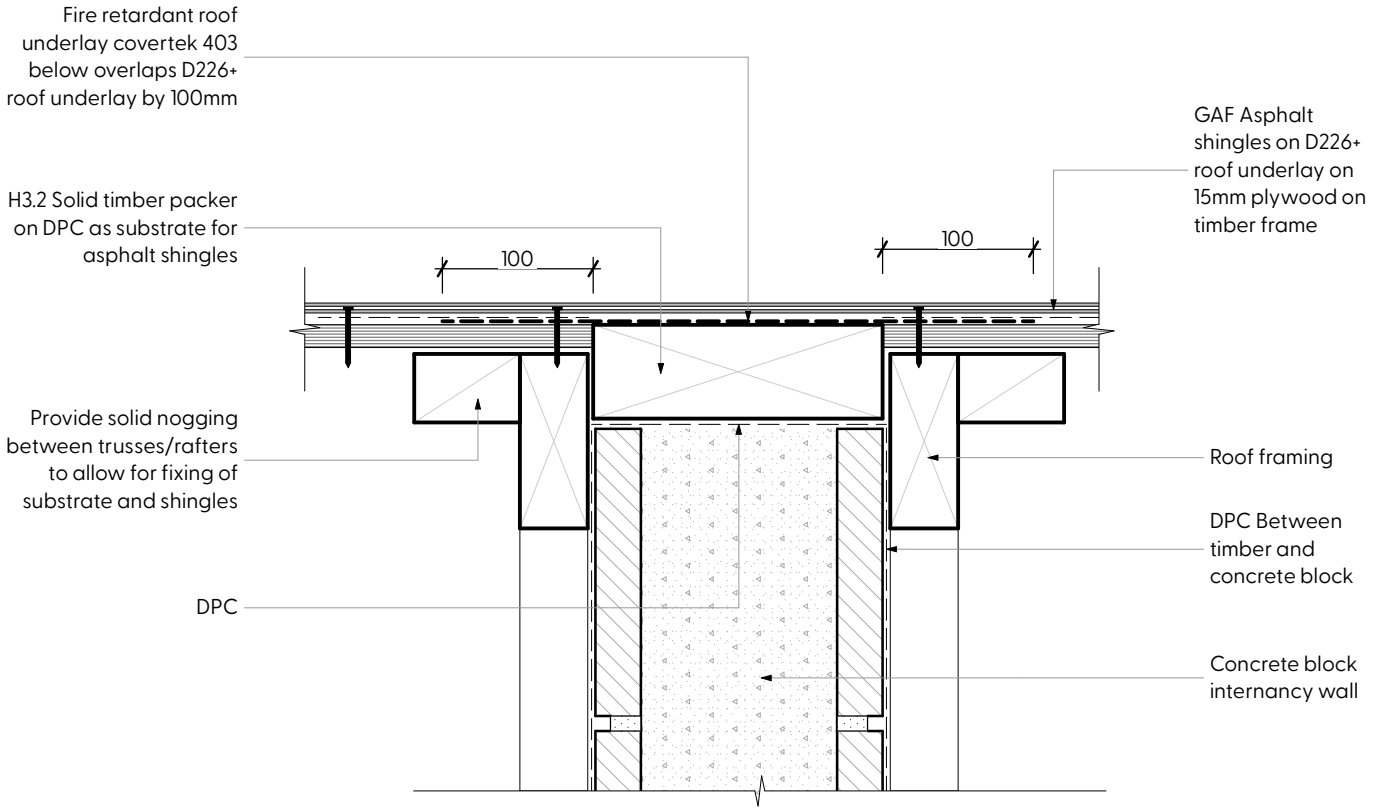

Notes:
This detail has been designed by DEASIGNFIRE Architects & Fire Consultants for GAF Shingle systems, BRANZ Appraisal 529.

Detail has been externally reviewed BRANZ Technical Services.

INTERTENANCY ROOF JUCTION (BLOCK WALL)

Scale: N.T.S.

Drawing reviewed January 2025 as part of 05/07/2018 drawing set

GAF Shingle Roof Systems

UltraGuard Roofing Systems

BRANZ Appraised Appraisal No.529

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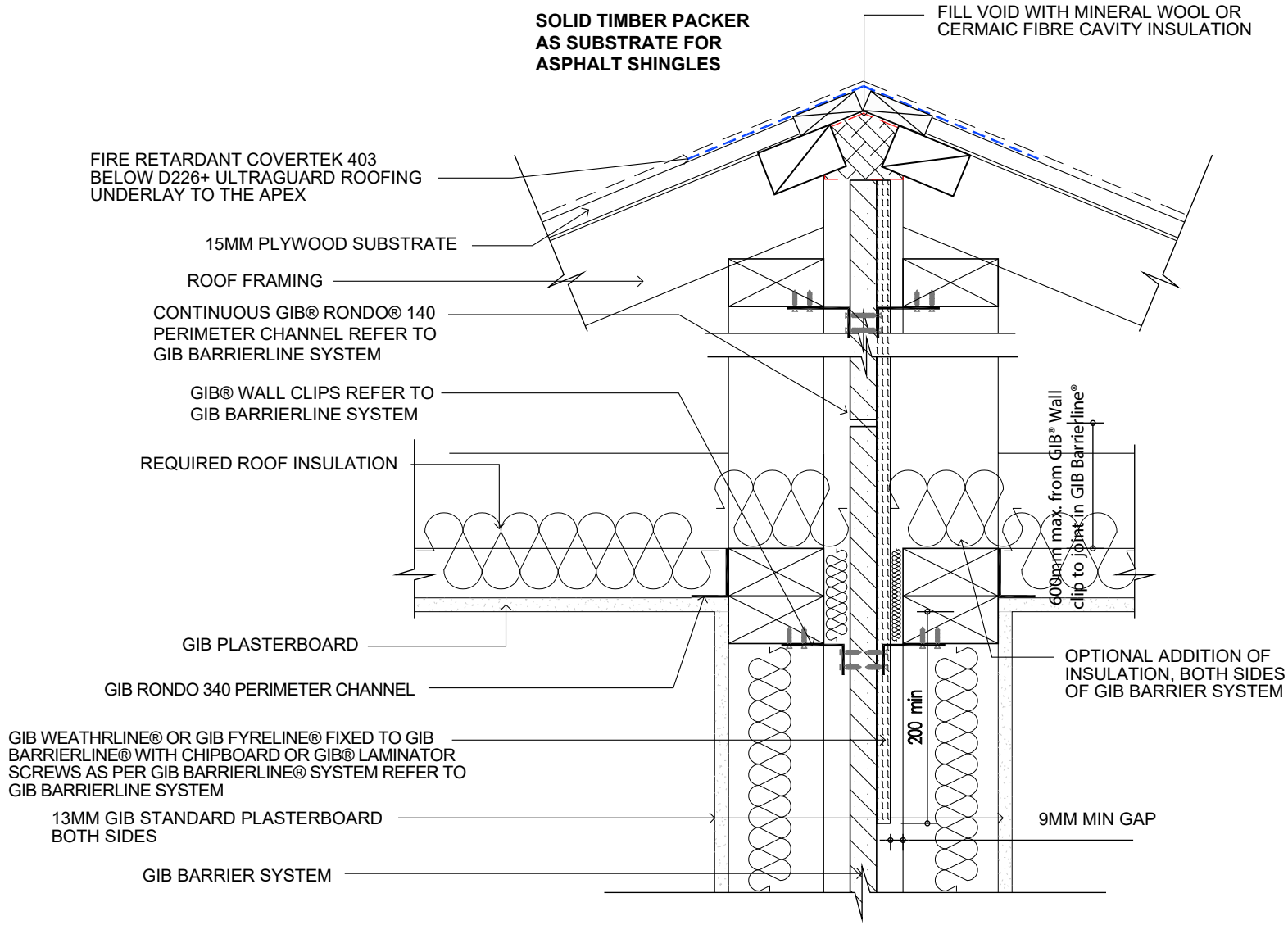

INTERTENANCY ROOF JUCTION (GIB RIDGE APEX)

Scale: N.T.S.

Drawing reviewed January 2025 as part of 05/07/2018 drawing set

Notes: This detail is in accordance with the BRANZ Appraisal certification. Contact us for any required customization.

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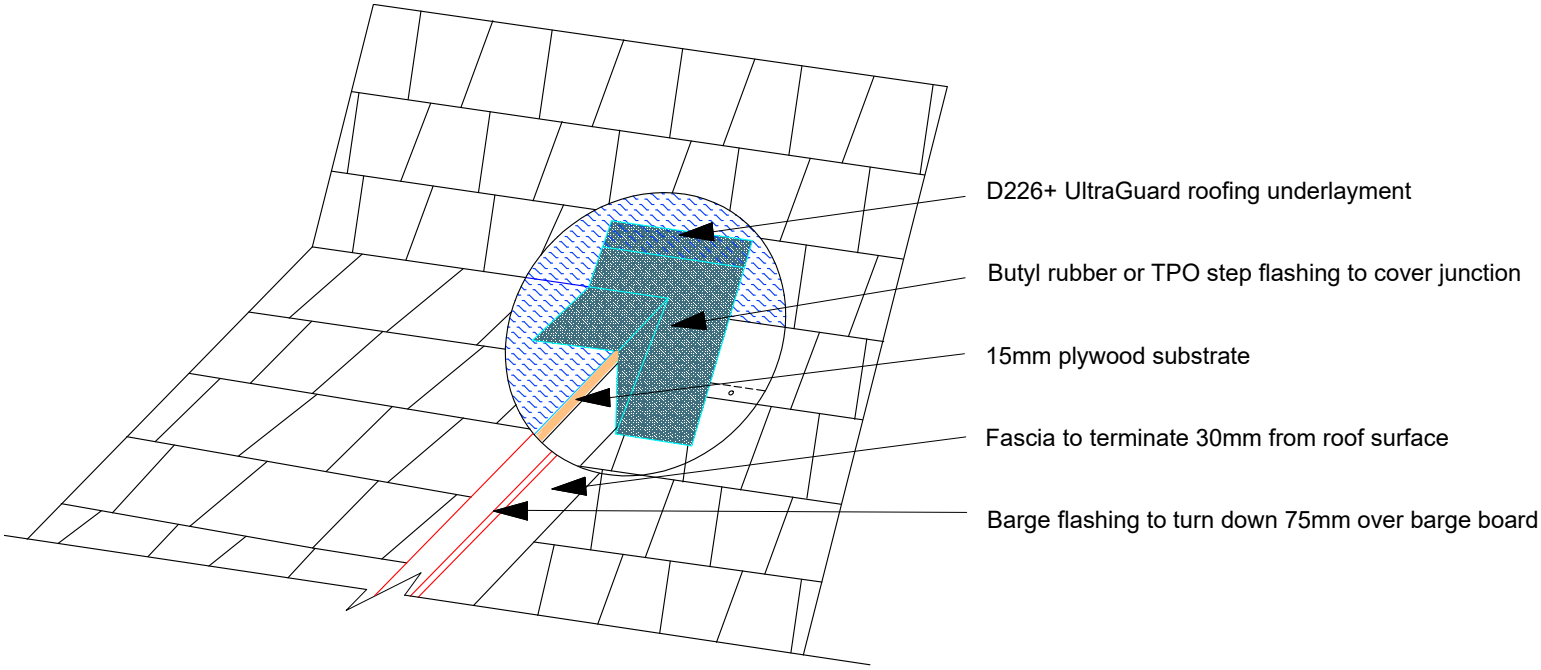

SHINGLE ROOF DUTCH DROMER GABLE

Scale: N.T.S.

Notes:

Step flashings are formed from Butyl or EPDM Rubber or TPO membrane sheet.

Step flashings are fixed with shingle nails to the wall and plywood deck.

GAF Shingle Roof Systems

UltraGuard Roofing Systems

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CONSTRUCTION NOTES:

READ THOROUGHLY BEFORE COMMENCING WORKS

ALL MATERIALS TO BE DRY AT THE TIME OF APPLICATION. UNDER NO CIRCUMSTANCES SHOULD ANY MATERIALS BE TORCH DRIED.

ALL SARKING AND SUBSTRATE MATERIALS TO BE DRY PRIOR TO LAYING OF WATERPROOF MEMBRANE. ENSURE ALL CONDENSATION AND RAINWATER HAS THOROUGHLY EVAPORATED PRIOR TO COMMENCEMENT OF WORKS.

ALL FLASHING AND FIXING MATERIALS TO BE CORROSION RESISTANT AND APPROVED FOR THE CORROSION ZONE AS SPECIFIED BY THE NEW ZEALAND BUILDING CODE AND NZS 3604:2011.

SEA SPRAY ZONES - TYPE 304 STAINLESS STEEL (SHINGLE FIXINGS ONLY)
ALL OTHER ZONES - TYPE 304 STAINLESS STEEL OR HOT DIP GALVANISED WITH ADDITIONAL PROTECTION AS PER NZS 3604:2011 4.4.4 AND 4.4.5 REQUIREMENTS.

FOR HIGH, VERY HIGH AND EXTRA WIND ZONES, THE NUMBER OF FIXINGS PER SHINGLE MUST BE 6 NAILS PER TILE AND ALL SHINGLE RAKES AND EAVES TO BE GLUED WITH APPROVED ROOFING CEMENT (BLACKJACK).

PLYWOOD SUBSTRATE TO BE LAID WITH STAGGERED JOINTS TO SHEET EDGES.
ALL SHEET EDGES SHALL BE SUPPORTED WITH NOGGS OR ROOF FRAMING FOR FIXING, UNLESS A STRUCTURALLY TESTED AND APPROVED TONGUE IN GROOVE EDGE SHALL PROVIDE EQUIVALENT OR BETTER SUPPORT. GALVANISED 'H' CLIPS CAN BE USED FOR SQUARE EDGE PLYWOOD.

ALL SHEETS TO BE LAID WITH A 2mm INTER SHEET EXPANSION JOINT PLYWOOD SUBSTRATE SHALL BE LAID WITH THE FACE GRAIN AT RIGHT ANGLES TO THE SUPPORTS, UNDER NO CIRCUMSTANCES SHALL THE SARKING / SUBSTRATE BE LAID DIAGONALLY. ALL SARKING / SUBSTRATES SHALL HAVE A MAX OF 20% MOISTURE CONTENT AT THE TIME OF APPLICATION OF MATERIALS.

ULTRAGUARD D226+ OR BRANZ APPRAISAL 529. SPECIFIED UNDERLAY USED WITH ASPHALT SHINGLE ROOFING. SEE BRANZ.529 2025. UNDERLAYS TO BE LAID WITH MIN 100mm END LAPS.

For Technical Assistance
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Technical Specification for New Zealand, 2 August 2012

FIXING SPECIFICATIONS

1 ROOF PENATRATIONS:
ROOF DECKS / SUBSTRATES SHOULD BE DRY, WELL SEASONED 150X25 BOARDS OR EXTERIOR GRADE PLYWOOD.

2 UNDERLAYMENT:
APPLY ULTRAGUAD D226+ ROOFING UNDERLAY OVER PLYWOOD SUBSTRATE IN ACCORDANCE WITH NZBC E2 REQUIREMENTS 8.1.5. ALL ROOF UNDERLAYS SHALL HAVE LAPS NO LESS THAN 100mm, ROOF UNDERLAYS SHALL BE LAID HORIZONTALLY, WITH THE UPPER SHEETS LAPPED OVER LOWER SHEETS TO ENSURE WATER IS SHED TO THE OUTER FACE OF THE UNDERLAY.

3 ROOF PITCH
MIN ACCEPTABLE ROOF PITCH = 9°. FOR ROOF PITCHES 9 - 12 DEGREES COMPLETELY COVER ROOF WITH 2 LAYERS OF UNDERLAY OR 1 LAYER OF 'PEEL AND STICK' IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. FOR ROOF PITCHES 12 DEGREES AND GREATER COMPLETELY COVER ROOF AREA WITH 1 LAYER OF ROOFING UNDERLAY.

4 SHINGLE STARTER COURSE
USE GAF STARTER STRIP OR A STRIP SHINGLE INVERTED WITH THE HEADLAP APPLIED AT THE EAVE EDGE. WITH AT LEAST 10mm TRIMMED FROM THE END OF THE FIRST SHINGLE, START AT THE RAKE EDGE OVERHANGING THE EAVE 12mm TO 20mm. FASTEN 50mm FROM THE LOWER EDGE AND 25mm FROM EACH SIDE. SHINGLES MAY BE APPLIED WITH A COURSE ALIGNMENT OF 45° ON THE ROOF.

5 FASTENERS
ALWAYS NAIL THROUGH THE FASTENER LINE. SHINGLING NAILS: STAINLESS STEEL GUN NAILS WITH 9mm HEAD, SEMI RING SHANKED, 32mm OR 25mm IN LENGTH WITH A 3mm DIAMETER SHANK.
ALWAYS FOLLOW MANUFACTURERS INSTRUCTIONS FOR NAIL POSISITIONING. WHERE APPLYING SHINGLES TO A ROOF THAT HAS AN EXPOSED OVERHANG, (FOR NEW ROOFS ONLY), 20mm RING SHNAK NAILS ARE ALLOWED TO BE USED FROM THE EAVE EDGE TO A POINT UP THE ROOF THAT IS PAST THE OUTSIDE WALL LINE. 25mm RING SHANK NAILS ALLOWED FOR REROOF.
NOTE: AN IMPROPERLY ADJUSTED NAIL GUN CAN RESULT IN UNDERDRIVEN NAILS THAT CAN CAUSE A FISHMOUTHED APPEARANCE AND PREVENT SEALING FASTENERS SHOULD BE LONG ENOUGH TO OBTAIN A 19mm PENETRATION OR PENETRATE THROUGH SUBSTRATE, WHICHEVER IS LESS.

1. FIRST COURSE START AT RAKE AND CONTINUE COURSE WITH FULL SHINGLES LAID FLUSH WITH THE STARTER COURSE. SHINGLE OFFESTS MUST BE A MINIMUM OF 150mm FROM THE SHINGLE BELOW.

2. SECOND COURSE START AT THE RAKE WITH THE SHINGLE HAVING 145mm TRIMMED OFF AND CONTINUE ACROSS ROOF WITH FULL LENGTH SHINGLES.

3. THIRD COURSE START AT THE RAKE WITH THE SHINGLE HAVING 285mm TRIMMED OFF AND CONTINUE ACROSS WITH FULL LENGTH SHINGLES.

4. FOURTH COURSE START AT THE RAKE AND CONTINUE ACROSS WITH FULL LENGTH SHINGLES ACROSS ROOF.

5. FIFTH AND SUCCEEDING COURSES REPEAT THE APPLICATION AS SHOWN FOR SECOND, THIRD AND FOURTH COURSES. DO NOT RACK SHINGLES STRAIGHT UP THE ROOF.

GAF Shingle Roof Systems

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Contact Information

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15 Kahikatea Flat Rd RD4
Dairy Flat, Auckland 0794

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Pick-up, Deliveries and Training
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Dairy Flat, Auckland 0794
(Opposite side from office)

Direct Office Contacts
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Monday to Friday

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