



Updated 6th December, 2019

**TECHNICAL DETAILS FOR
'GAF TPO SINGLE-PLY ROOFING SYSTEM'
BRANZ.823**



Technical Details as listed are available:

- 101 - PARAPET FLASHING
- 102 - PARAPET FLASHING ALTERNATIVE
- 103 - DRIP EDGE ALTERNATIVE
- 104 - DRIP EDGE DETAIL
- 105 - BARGE FLASHING
- 106 - BARGE FLASHING ALTERNATIVE
- 107 - PARAPET TERMINATION BAR
- 108 - BARGE TERMINATION BAR
- 109 - BARGE WRAP DETAIL
- 110 - WELDABLE TPO COATED DRIP EDGE FLASHING
- 201 - CHASE FLASHING ALTERNATIVE
- 202 - CHASE FLASHING
- 203 - WALL TRANSITION
- 204 - SKYLIGHT FLASHING
- 301 - METAL ROOF TRANSITION
- 302 - SHINGLE ROOF TRANSITION
- 303 - METAL ROOF TO TPO
- 304 - SHINGLE ROOF TO TPO
- 305 - TPO - ALUMINIUM JOINERY
- 306 - SUBSTRATE FLASHING JOINT
- 401 - T-JOINT AND JOINT END
- 402 - PREFORMED INSIDE CORNER
- 403 - FOLDED INSIDE CORNER
- 404 - FABRICATED INSIDE CORNER
- 405 - FLUTED OUTSIDE CORNER
- 406 - WALL / CURB OUTSIDE CORNER
- 407 - POST / BALUSTRADE BASE
- 408 - DRESSED BATTEN DETAIL
- 501 - PIPE PENETRATION
- 502 - SPLIT PIPE BOOT
- 503 - HIGH TEMPERATURE STACK
- 504 - POURABLE SEALANT POCKET
- 505 - SQUARE TUBE WRAP
- 506 - DRAIN DROPPER
- 507 - COATED METAL SCRUPPER
- 508 - OVER FLOW PARAPET DRAIN
- 509 - PREMOLDED PIPE BOOT
- 601 - FLOOR JACK PEDESTAL - DECK
- 602 - FLOOR JACK PEDESTAL - TERMINATION
- 603 - FLOOR JACK PEDESTAL - PAVING TILES
- 604 - FLOOR JACK PEDESTAL - DOOR SILL

**Everguard and Everguard Extreme TPO Roof and Deck Membranes -
Technical and Installation Information**

Product Description

Everguard and Everguard Extreme TPO Roof and Deck Membrane Systems are single ply, polyester fabric reinforced, thermoplastic polyolefin (TPO) fully bonded waterproofing sheet membranes for roofs and decks.

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

Scope of use

Everguard and Everguard Extreme TPO Roof and Deck Membrane Systems are for use as roof and deck waterproofing membranes on buildings within the following scope:

- the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1; or,
- the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1 with respect to building height and maximum floor plan area when subject to specific structural design; and,
- with building structures designed and constructed to meet the requirements of the NZBC; and,
- with substrates of plywood or suspended concrete slabs; and,
- with minimum falls for roofs of 1:30 and decks of 1:40
- with decks that have a maximum area of 40 m²; and ,
- situated in NZS 3604 Wind Zones, up to, and including Extra High.

Everguard and Everguard Extreme TPO Roof and Deck Membrane Systems are also for use as roof and deck waterproofing membranes on buildings within the following scope:

- subject to specific structural and weather tightness design; and,
- with substrates of plywood or suspended concrete slab; and,
- situated in specific design wind pressures up to a maximum design differential ultimate limit state (ULS) of 3 kPa; and,
- with the weather tightness design of all junctions for each specific structure being the responsibility of the building designer.

Roofs and decks waterproofed with Everguard and Everguard Extreme TPO Roof and Deck Membrane Systems must be designed and constructed in accordance with the following limitations:

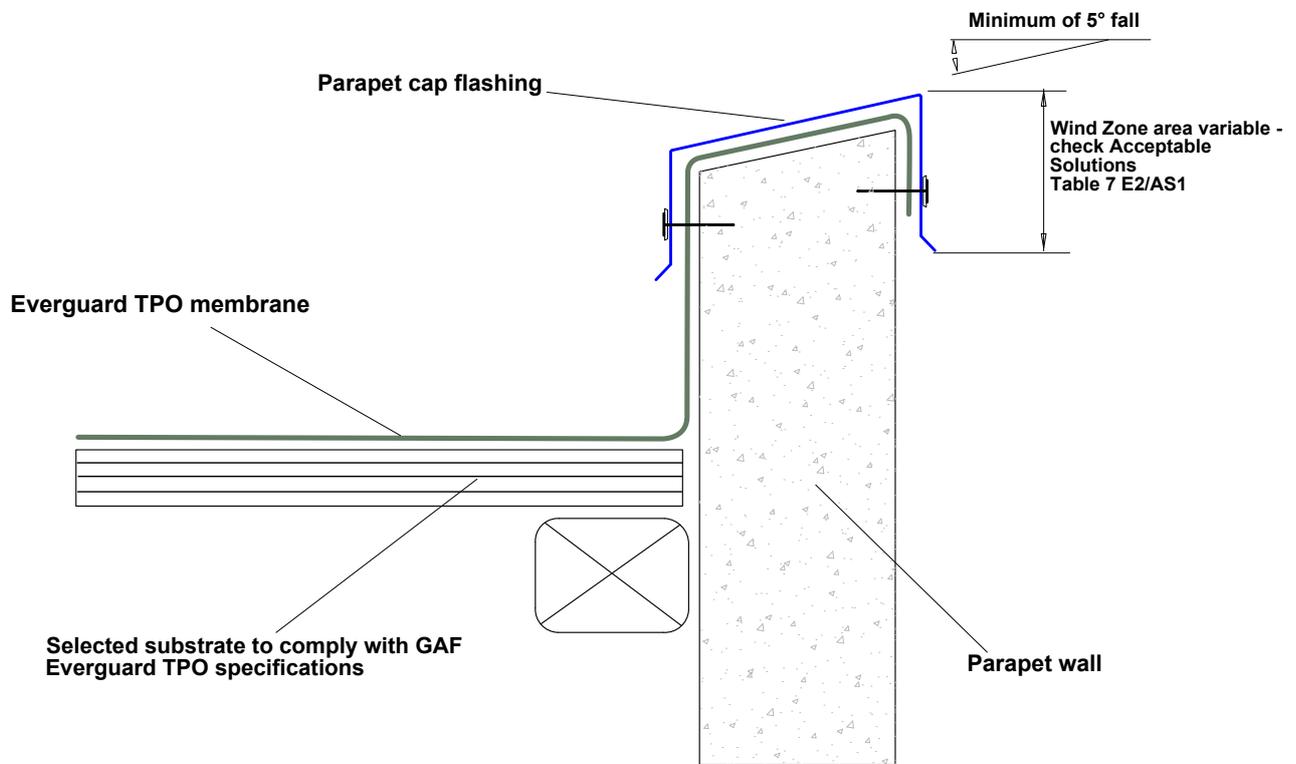
- nominally flat roofs and decks and pitched roofs constructed to drain water to gutters and drainage outlets complying with the NZBC; and,
- with no integral roof gardens; and,
- no steps in level within the deck area, no integral roof gardens and no downpipes direct discharge to decks; and,
- with deck membranes continually protected from physical damage by a pedestrian protection system.

The design and construction of the substrate and movement and control joints is specific to each building, and therefore is the responsibility of the building designer and building contractor.

For technical assistance call 0800 423355
or visit www.gafroofing.co.nz

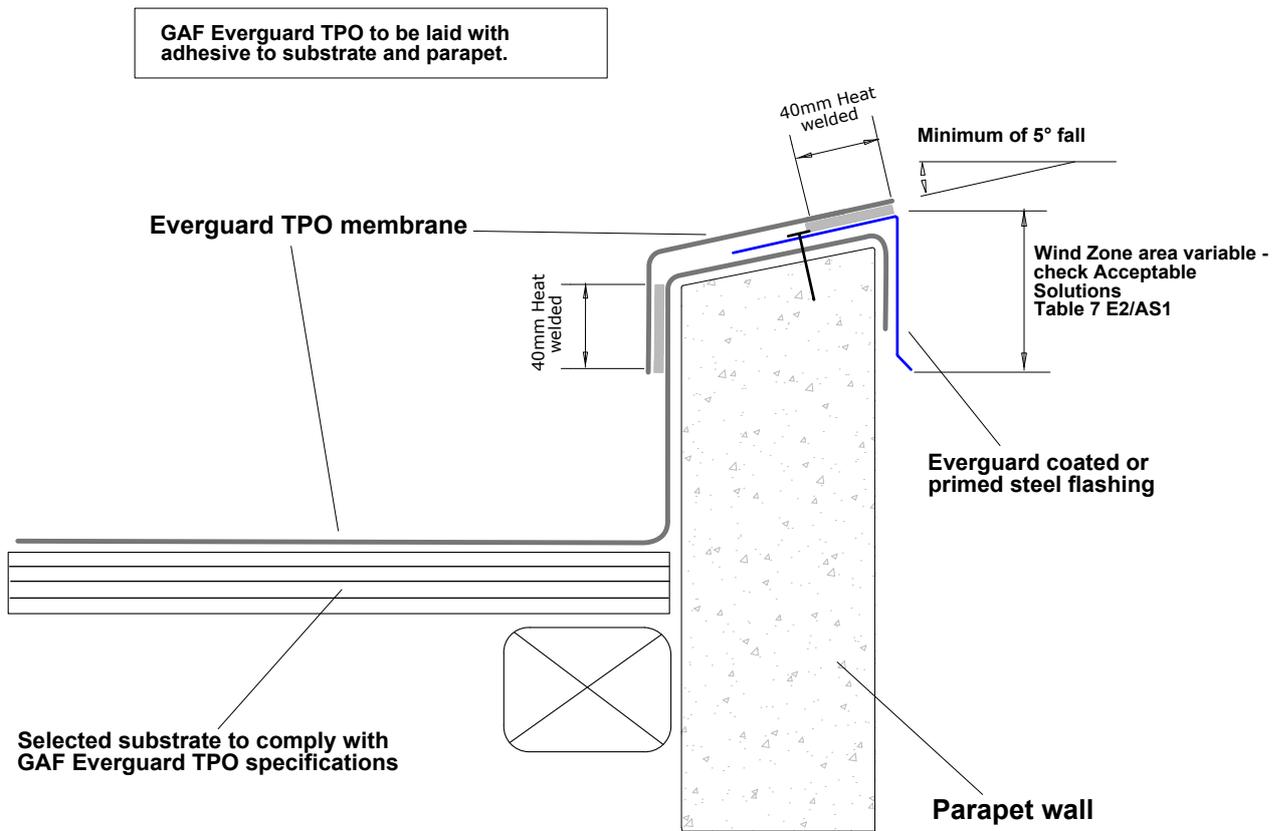
CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

TPO to be laid with adhesive to substrate and parapet prior to installation of parapet cap.



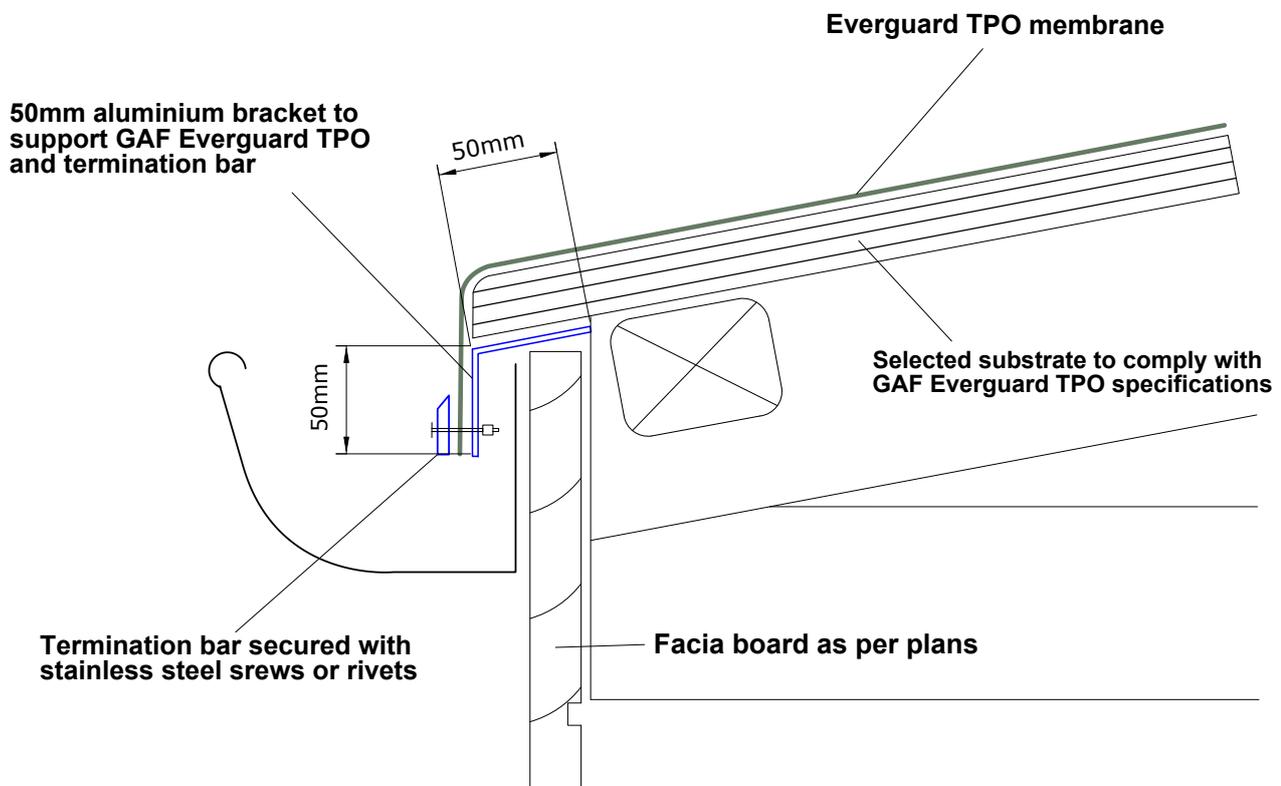
	DRAWING: PARAPET FLASHING	DATE: 10 JUNE 2014	DETAIL: 101	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



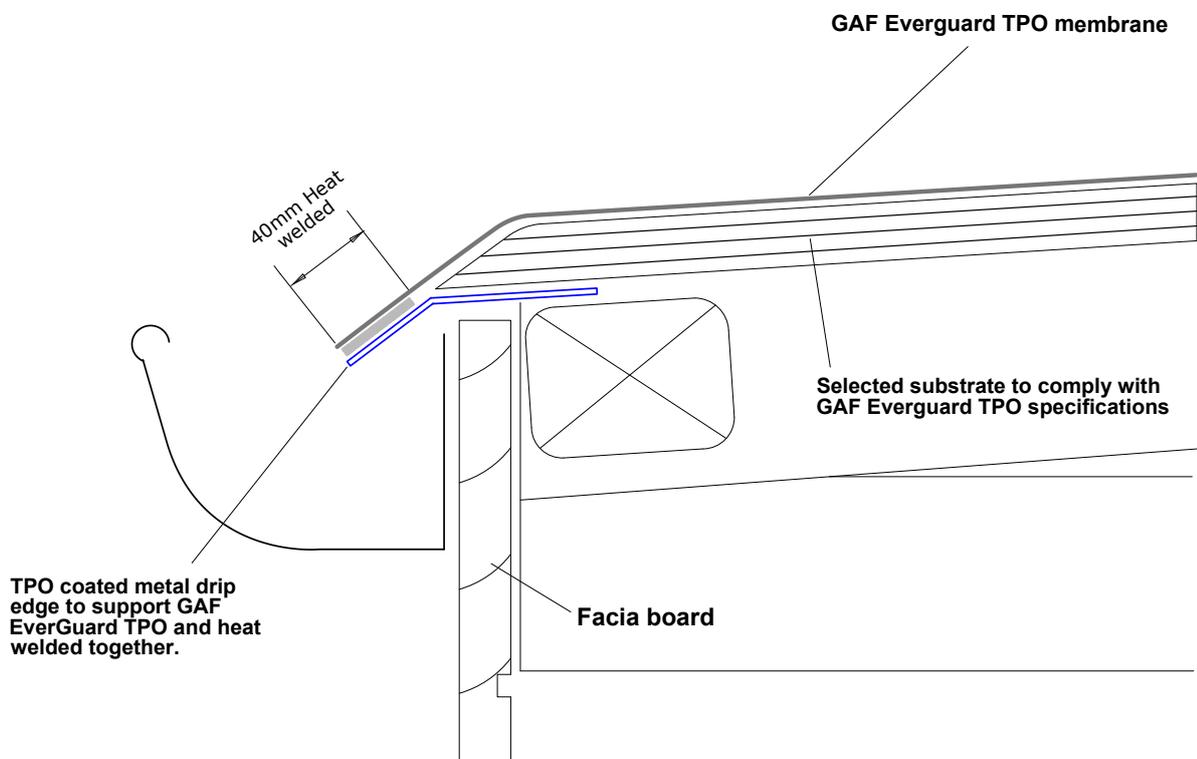
	DRAWING: PARAPET WALL ALTERNATIVE	DATE: 10 JUNE 2014	DETAIL: 102	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



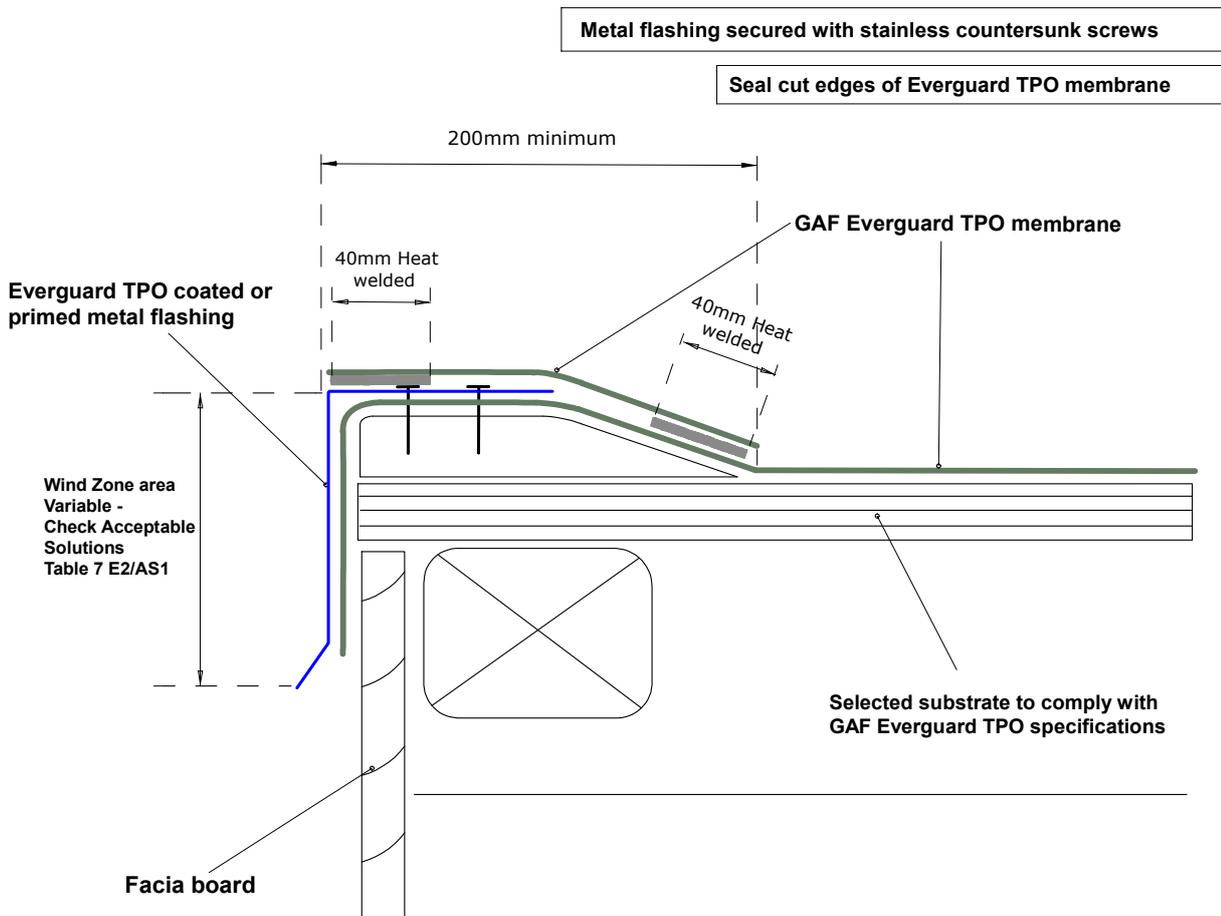
	DRAWING: DRIP EDGE ALTERNATIVE	DATE: 10 JUNE 2014	DETAIL: 103	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



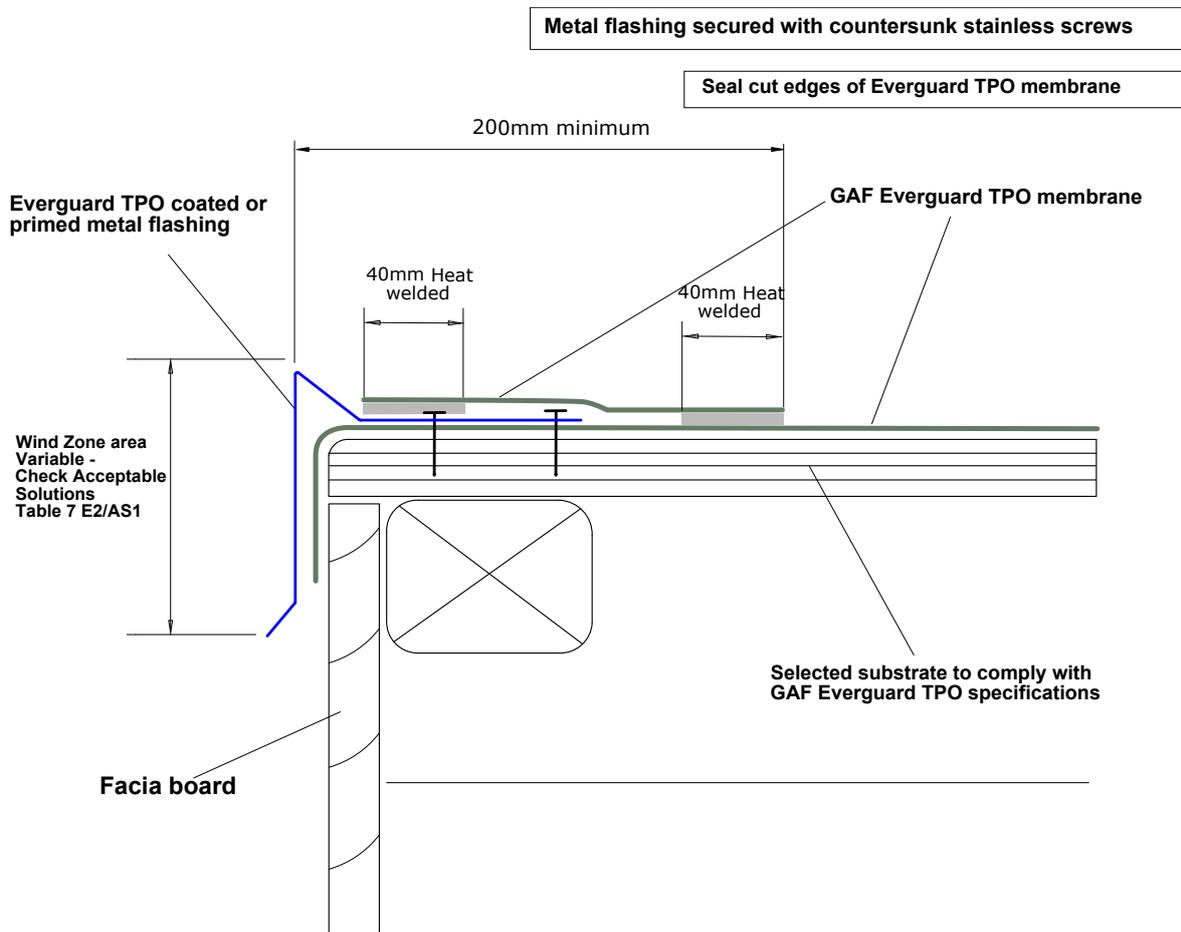
	DRAWING: DRIP EDGE SYSTEM	DATE: 10 JUNE 2014	DETAIL: 104	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



	DRAWING: BARGE FLASHING SYSTEM	DATE: 10 JUNE 2014	DETAIL: 105	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

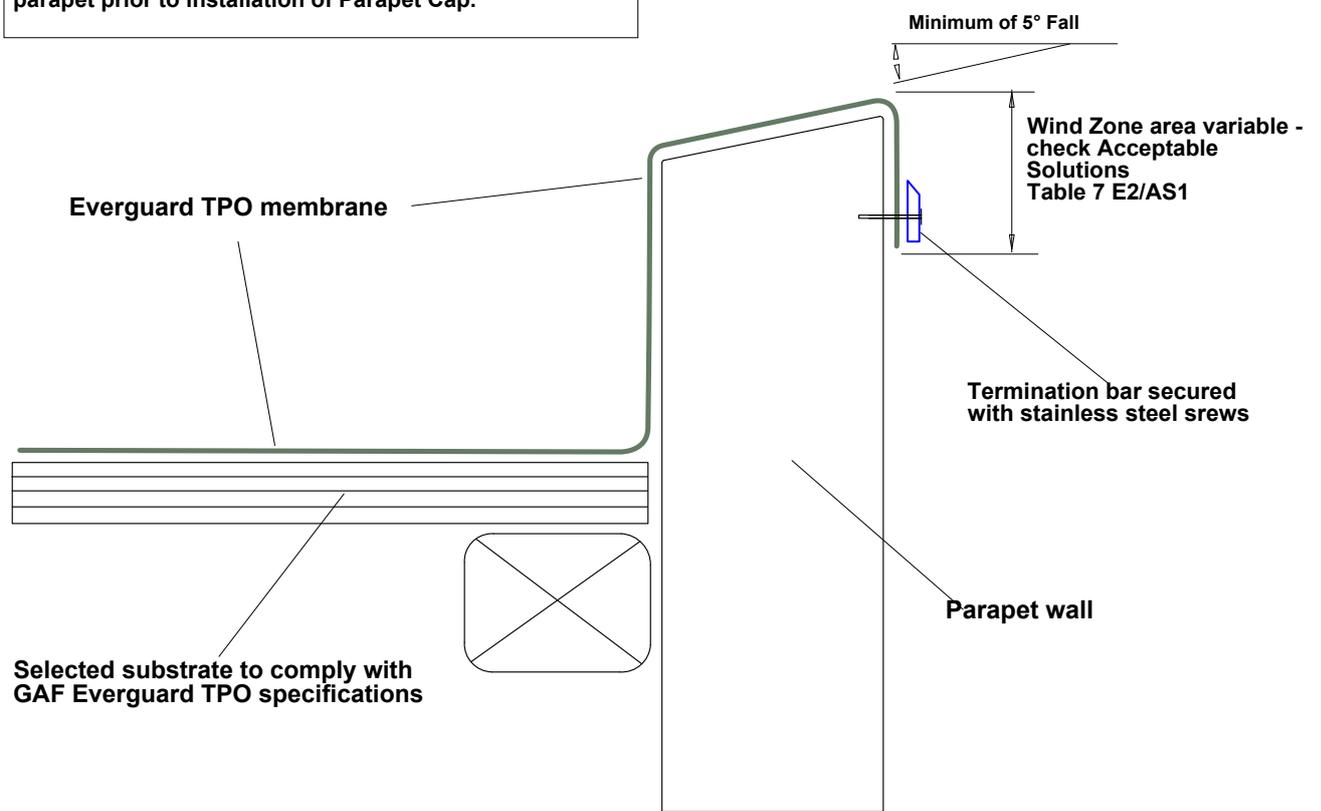
CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



	DRAWING: BARGE FLASHING ALT	DATE: 10 JUNE 2014	DETAIL: 106	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

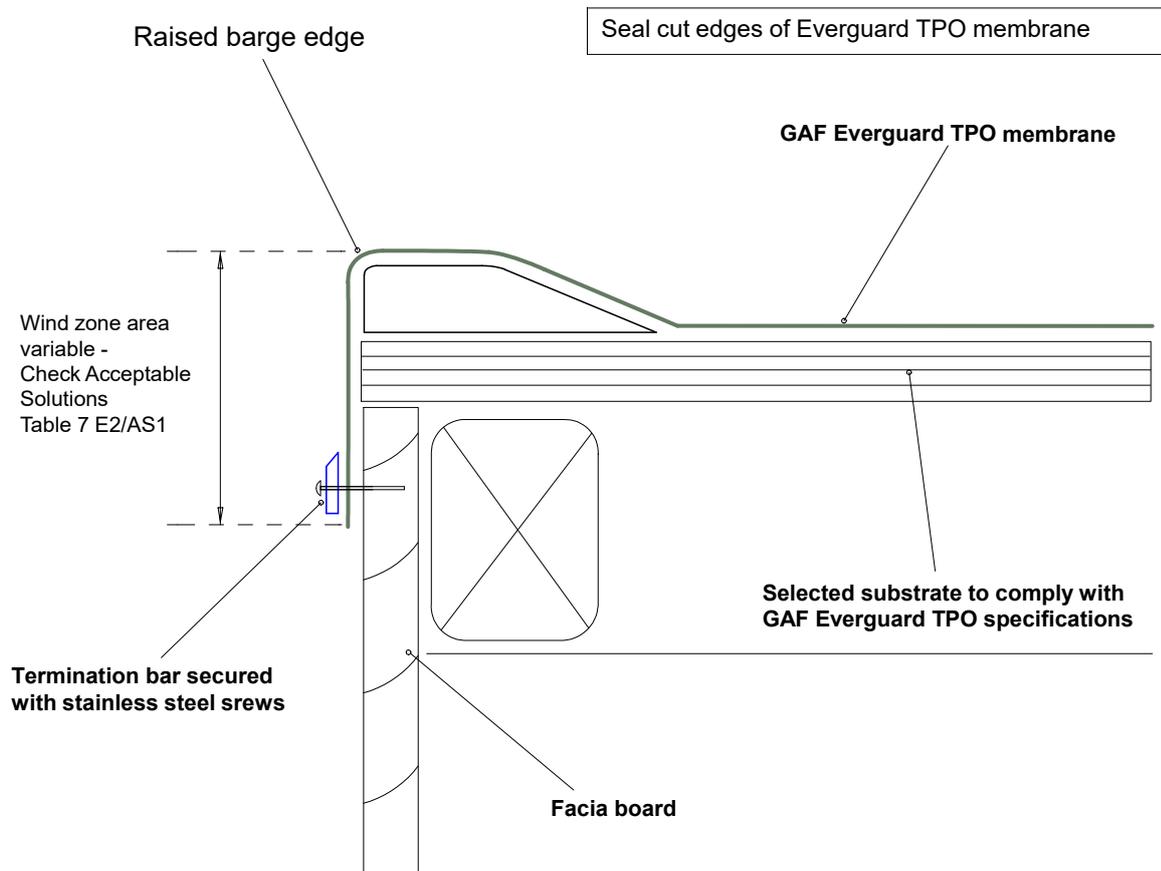
CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

TPO to be laid with adhesive to substrate and parapet prior to installation of Parapet Cap.



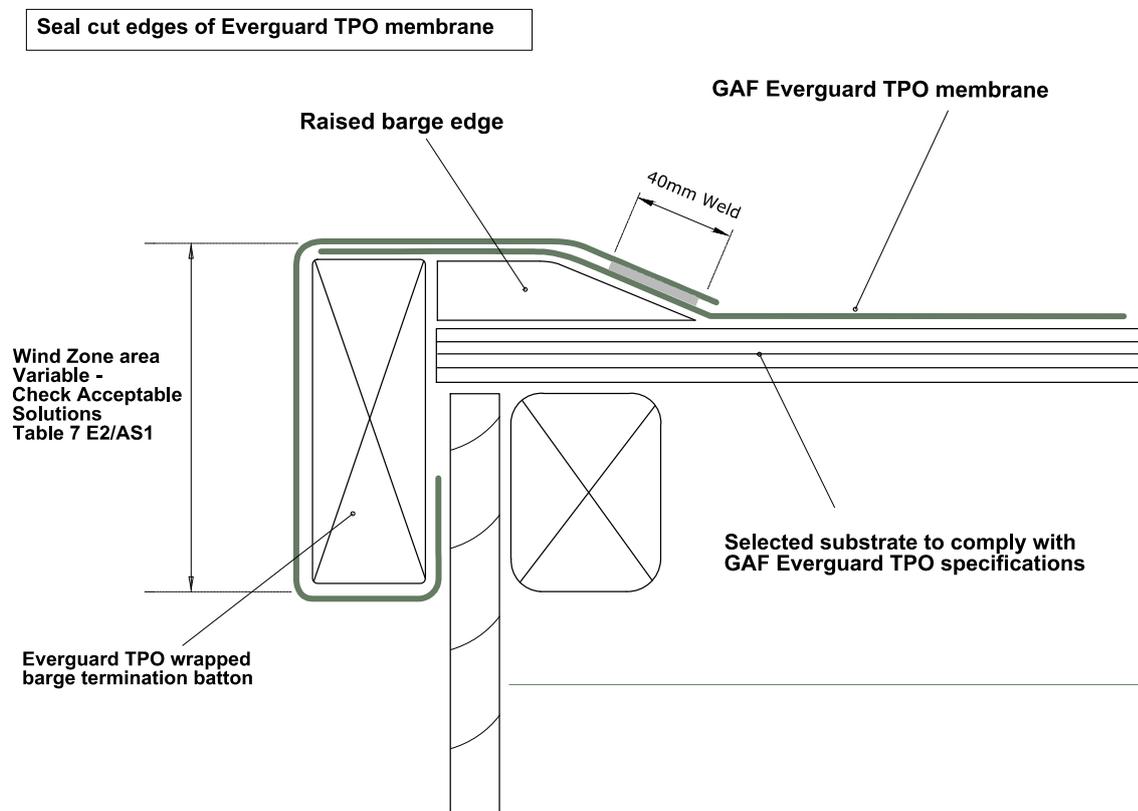
	DRAWING: PARAPET TERMINATION BAR	DATE: 10 JUNE 2014	DETAIL: 107	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



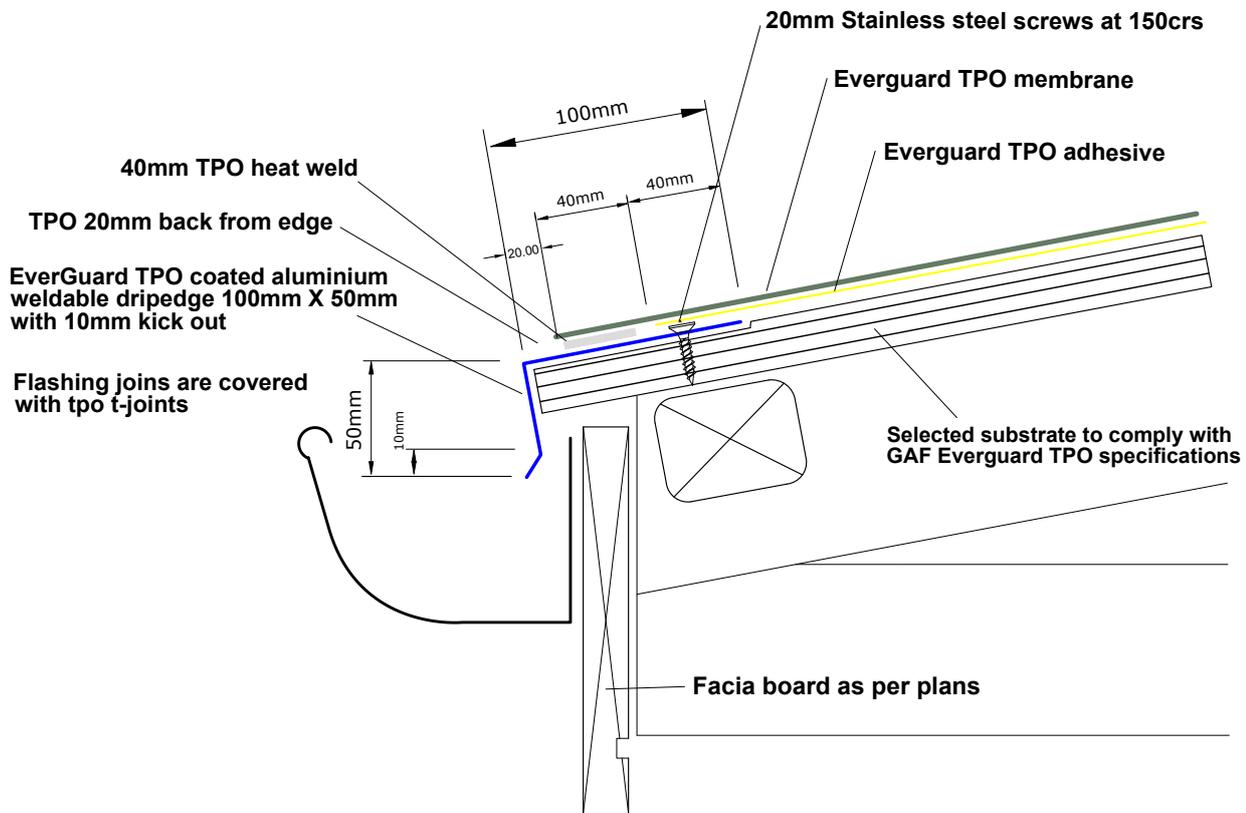
	DRAWING: BARGE TERMINATION BAR	DATE: 10 JUNE 2014	DETAIL: 108	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



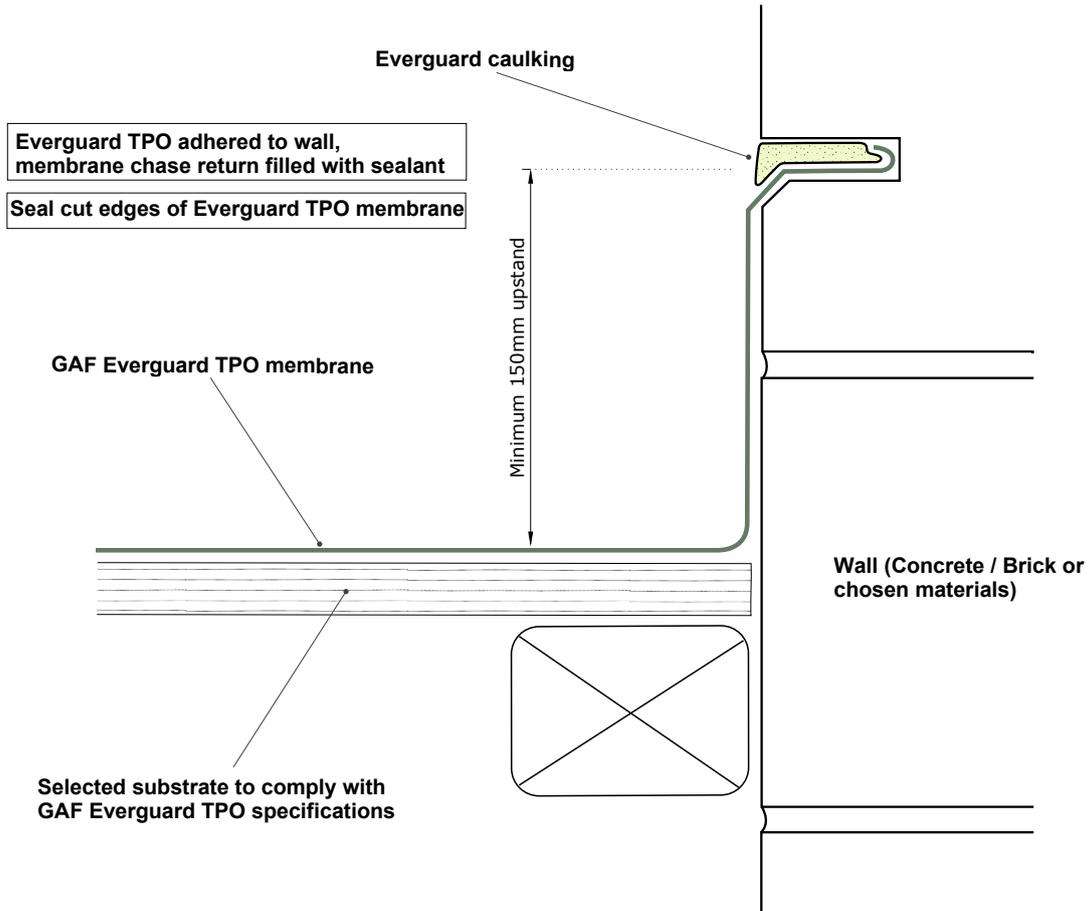
	DRAWING: BARGE WRAP DETAIL	DATE: 10 JUNE 2014	DETAIL: 109	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



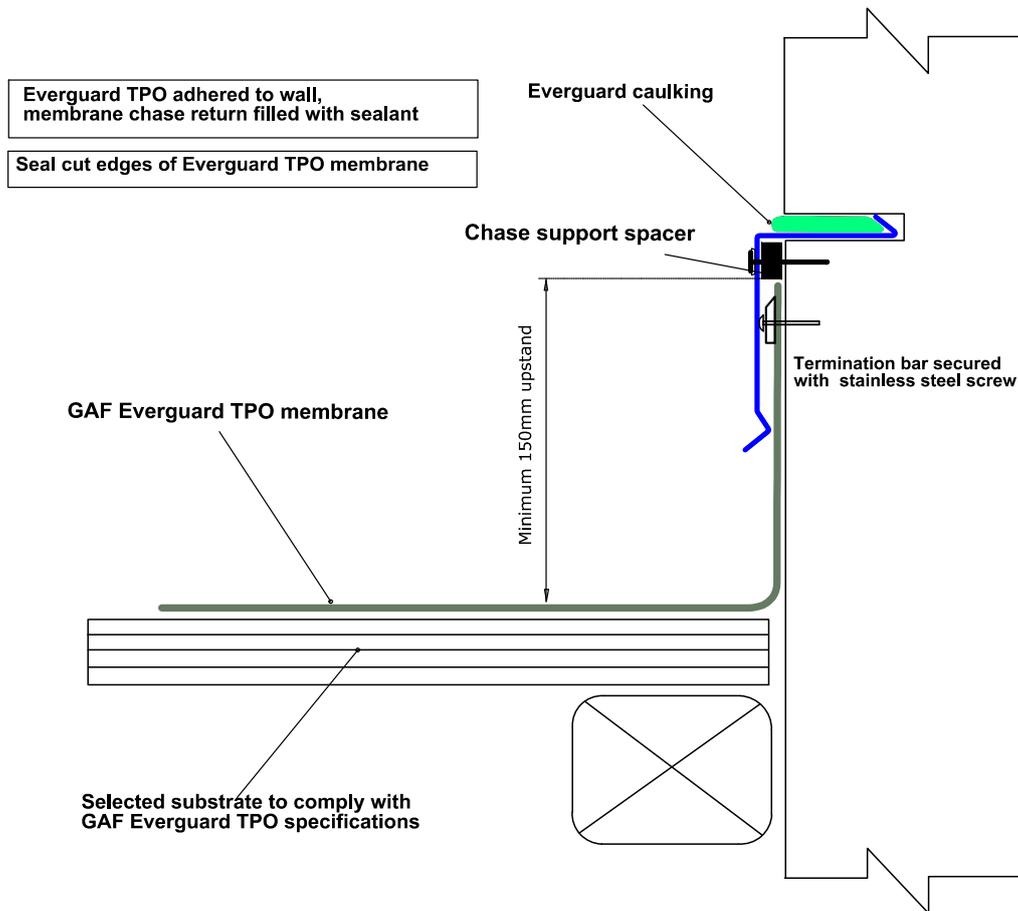
	DRAWING: WELDABLE TPO COATED DRIP EDGE FLASHING	DATE: 01 MARCH 2019	DETAIL: 110	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: NTS		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



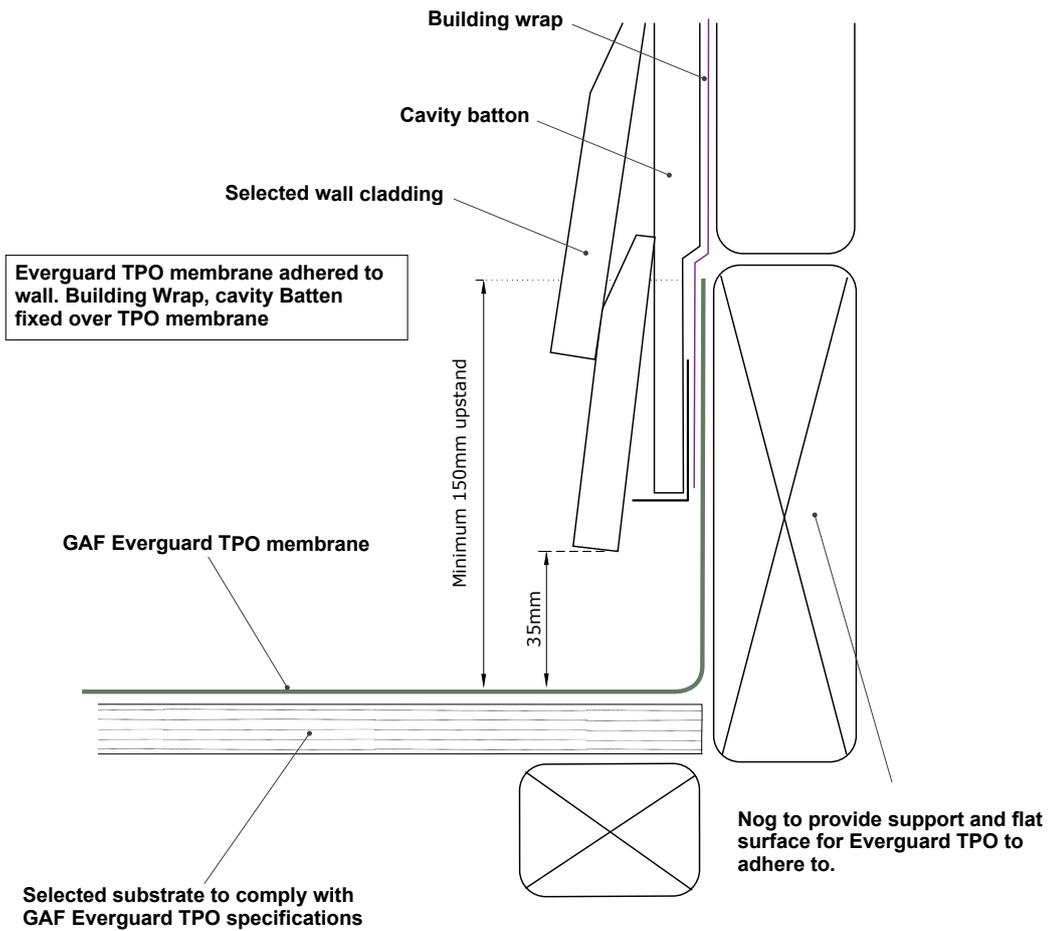
	DRAWING: CHASE FLASHING SYSTEM	DATE: 10 JUNE 2014	DETAIL: 201	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



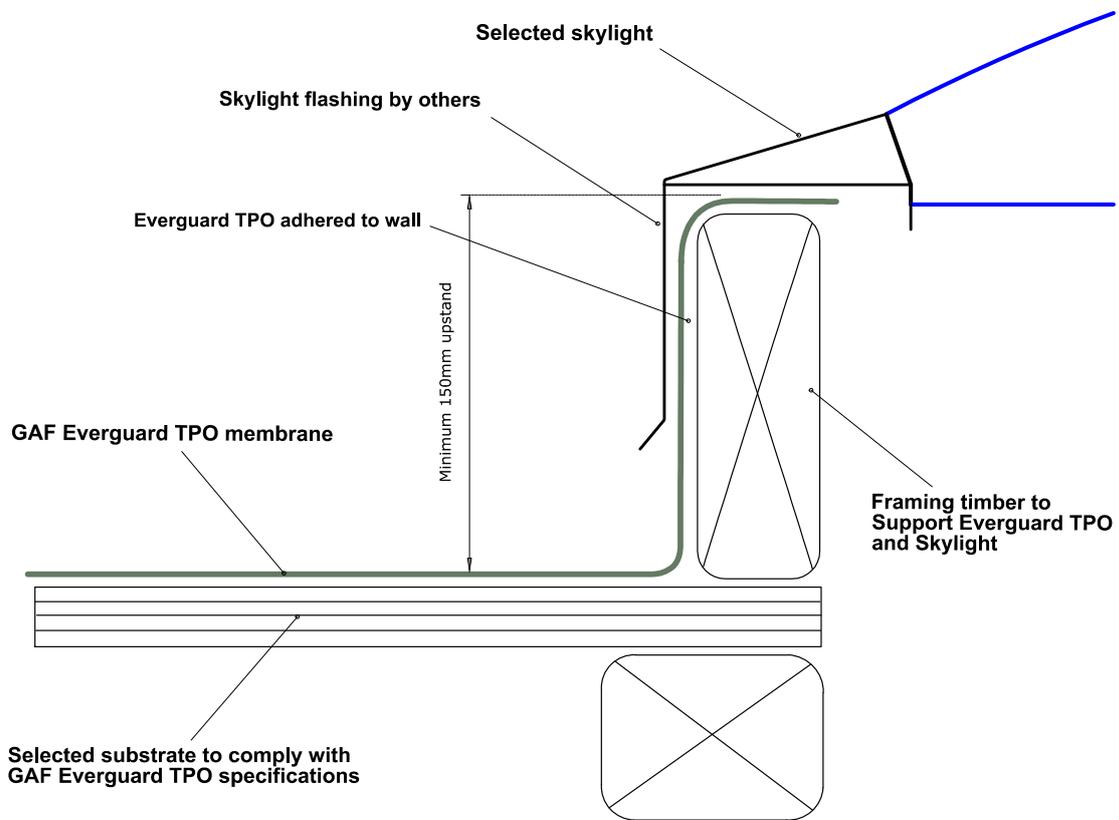
	DRAWING: CHASE FLASHING SYSTEM	DATE: 10 JUNE 2014	DETAIL: 202	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



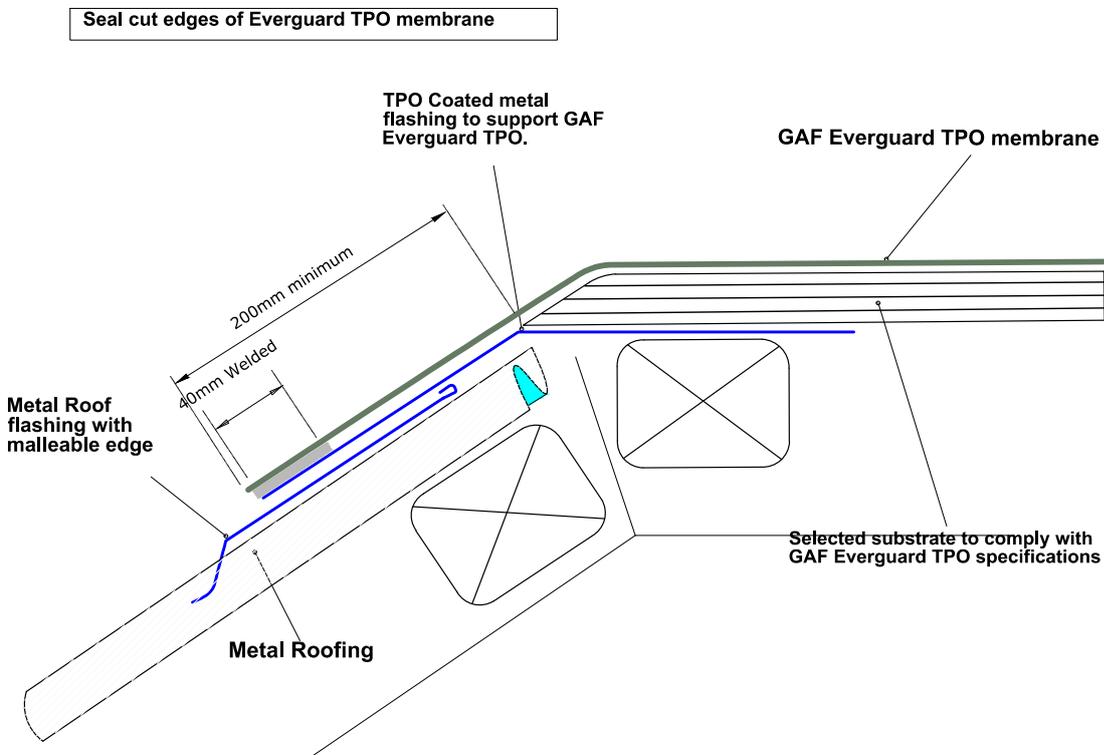
	DRAWING: TRANSITION - WALL	DATE: 10 JUNE 2014	DETAIL: 203	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



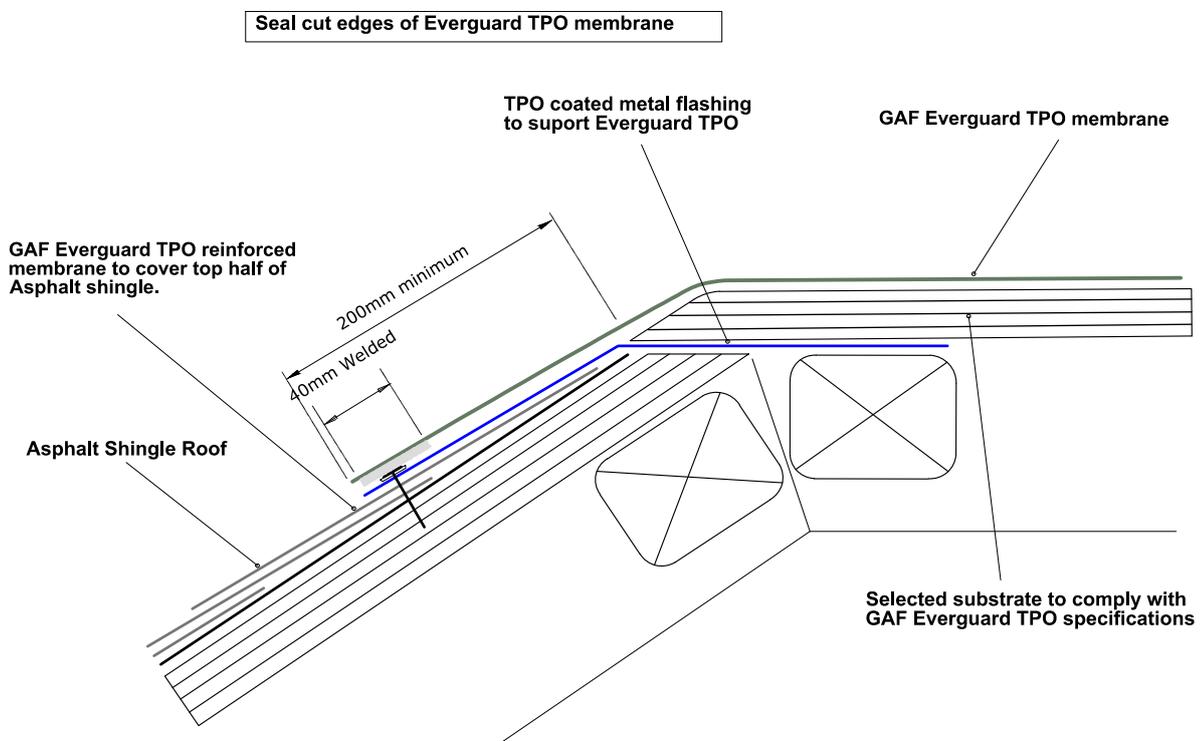
	DRAWING: SKYLIGHT FLASHING	DATE: 10 JUNE 2014	DETAIL: 204	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



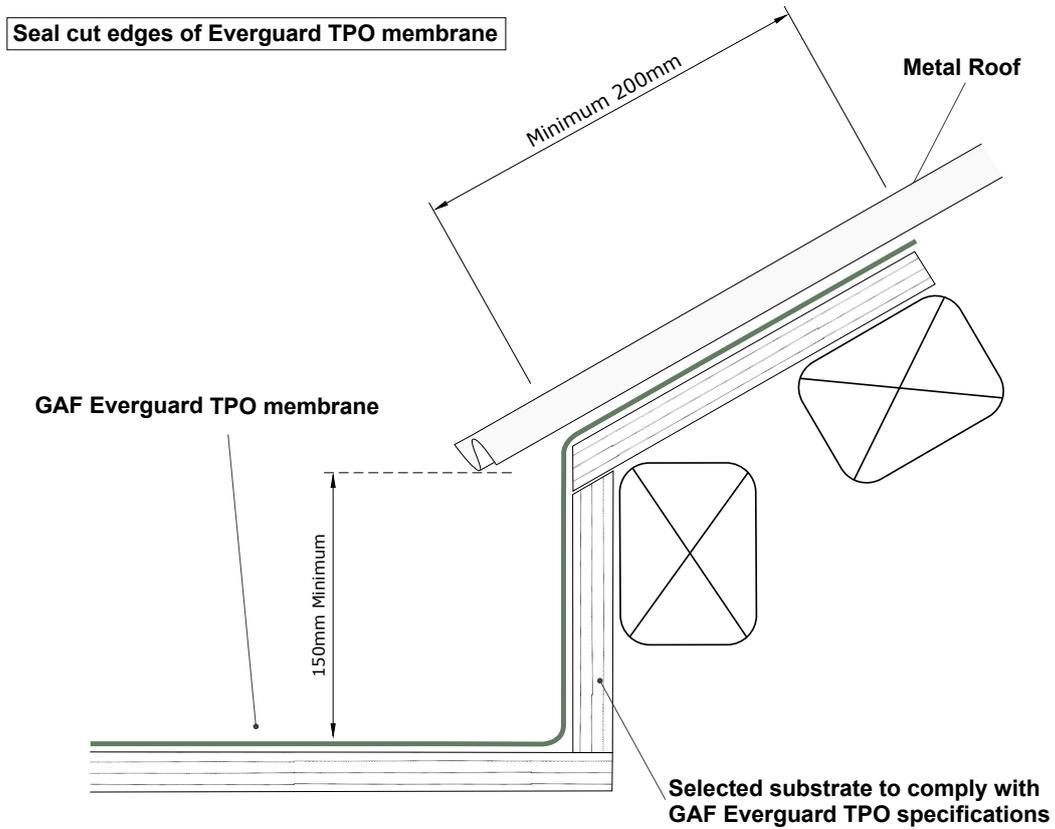
	DRAWING: TRANSITION - METAL ROOF	DATE: 10 JUNE 2014	DETAIL: 301	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



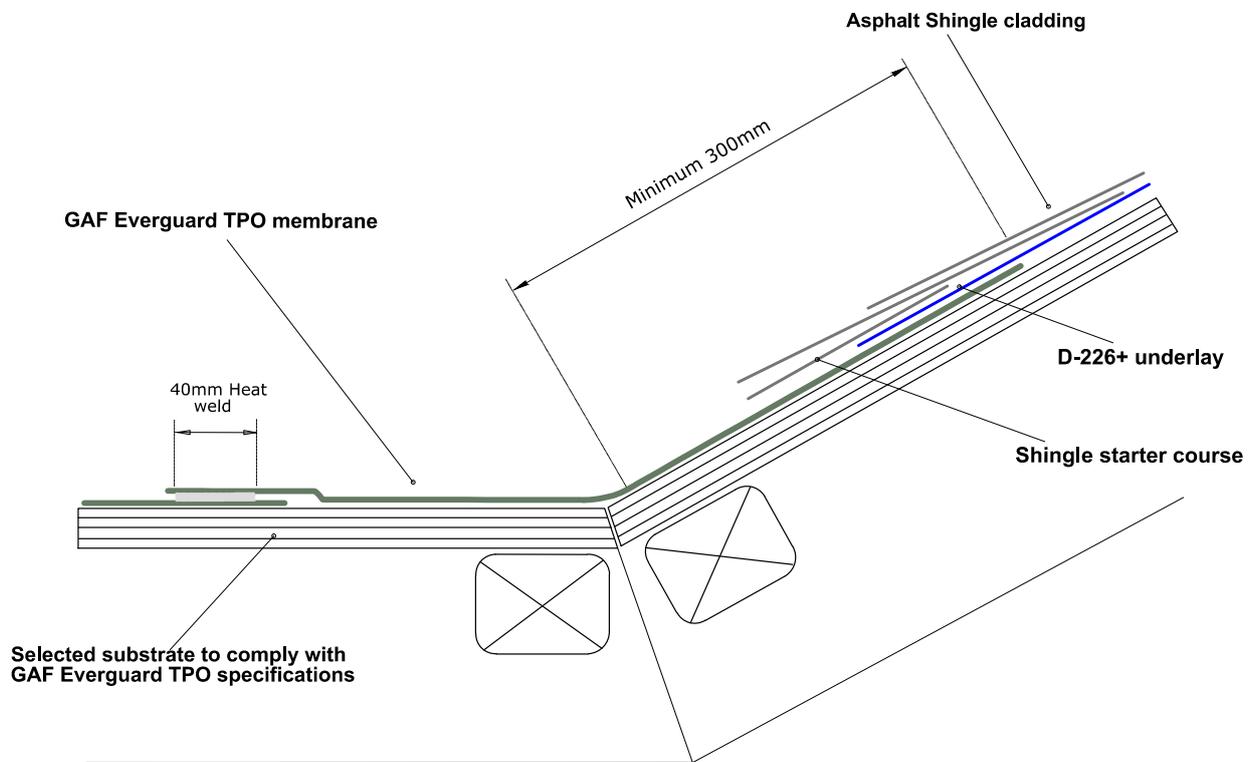
	DRAWING: TRANSITION - SHINGLE ROOF	DATE: 10 JUNE 2014	DETAIL: 302	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



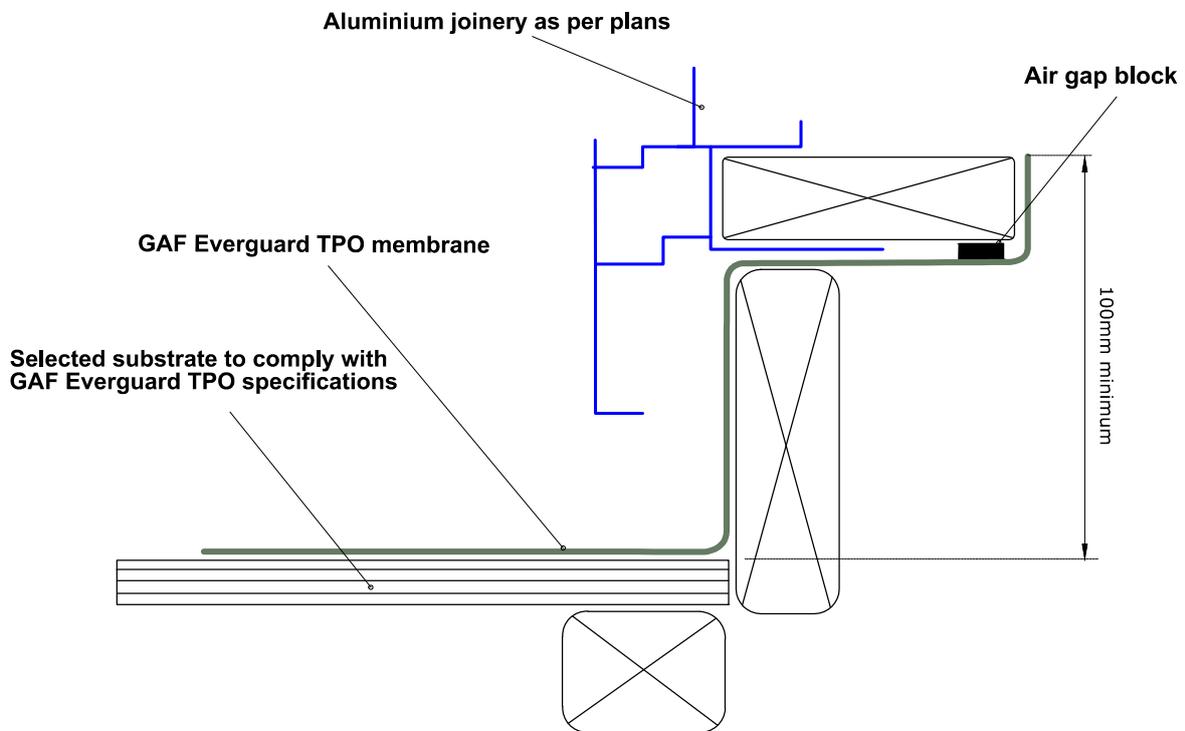
	DRAWING: METAL ROOF TO TPO	DATE: 10 JUNE 2014	DETAIL: 303	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



	DRAWING: SHINGLE ROOF TO TPO	DATE: 10 JUNE 2014	DETAIL: 304	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

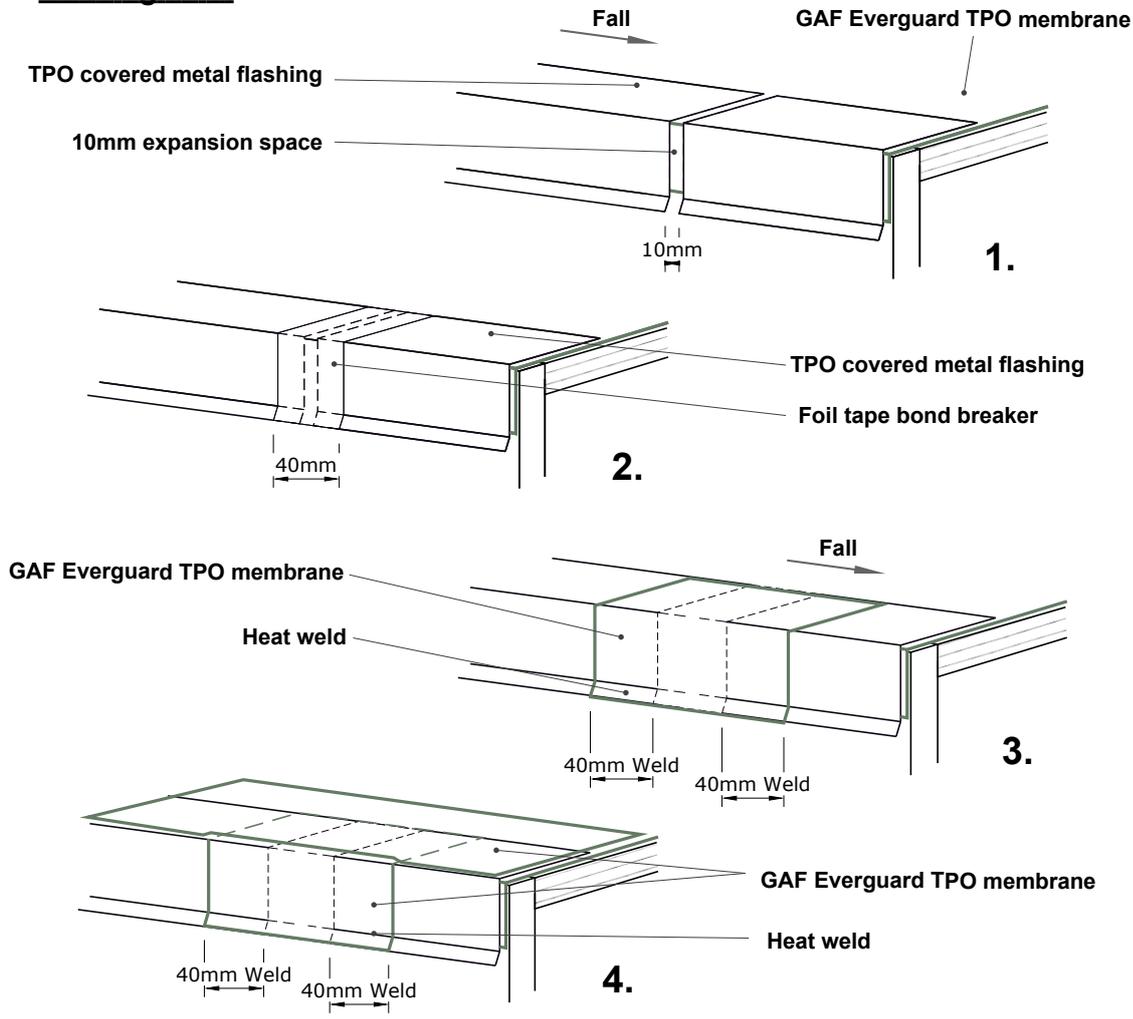
CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



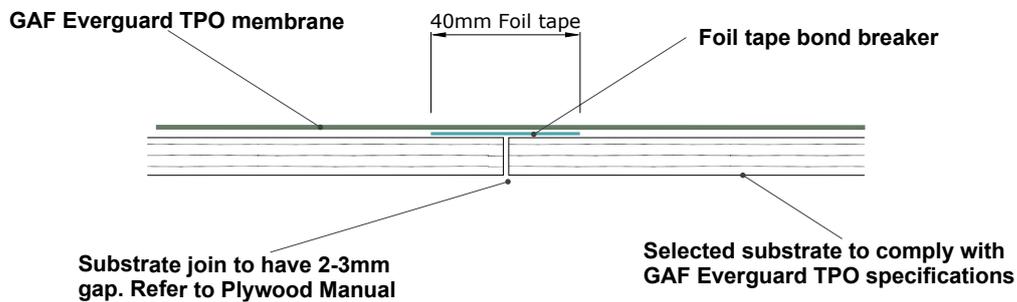
	DRAWING: TPO TO ALUMINIUM JOINERY	DATE: 10 JUNE 2014	DETAIL: 305	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

Flashing Joint



Substrate Joint

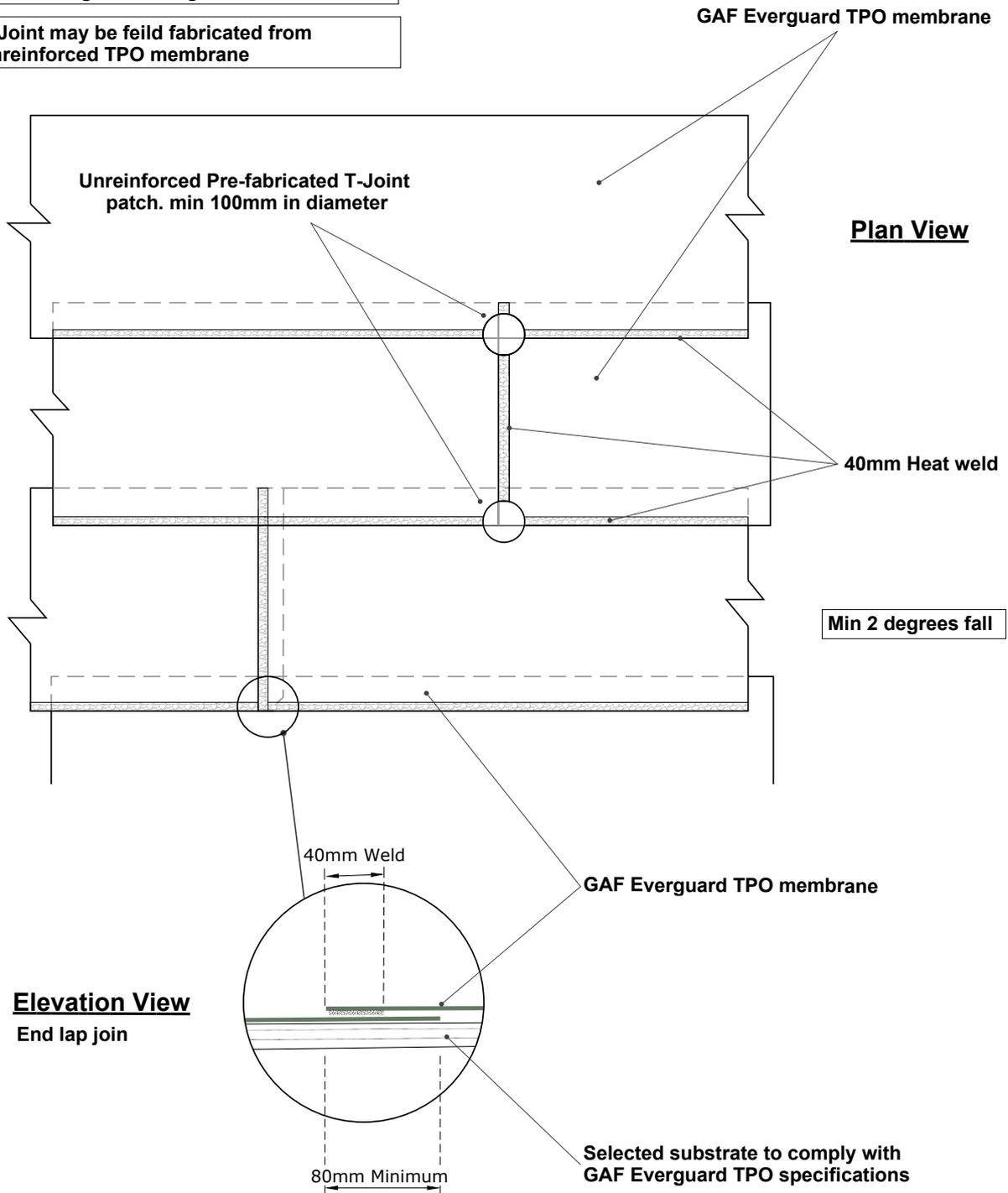


	DRAWING: SUBSTRATE / FLASHING JOINT	DATE: 10 JUNE 2014	DETAIL: 306	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

Seal cut edges of Everguard TPO membrane

T-Joint may be feild fabricated from unreinforced TPO membrane

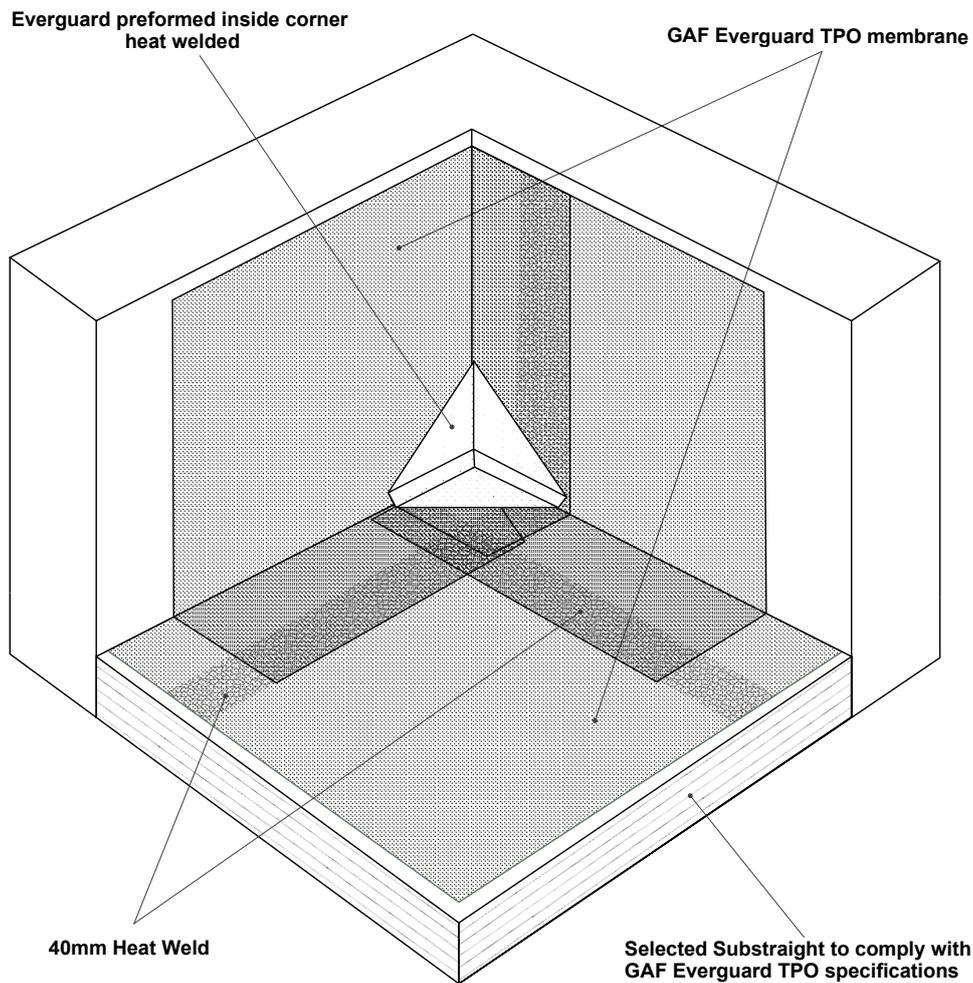


	DRAWING: T-JOINT / END JOINT DETAIL	DATE: 10 JUNE 2014	DETAIL: 401	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

Seal cut edges of Everguard TPO membrane

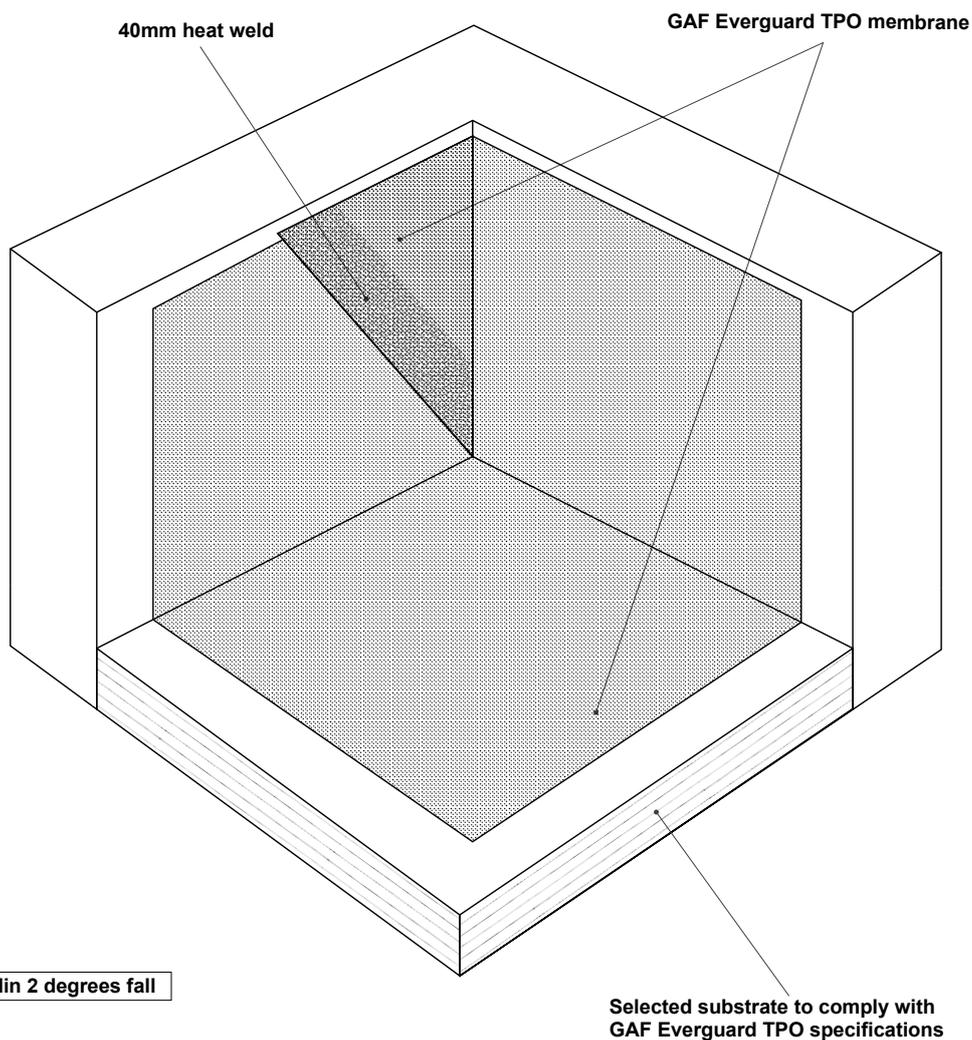
Min 2 degrees fall



	DRAWING: PRE-FORMED INSIDE CORNER	DATE: 10 JUNE 2014	DETAIL: 402	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

Seal cut edges of Everguard TPO membrane



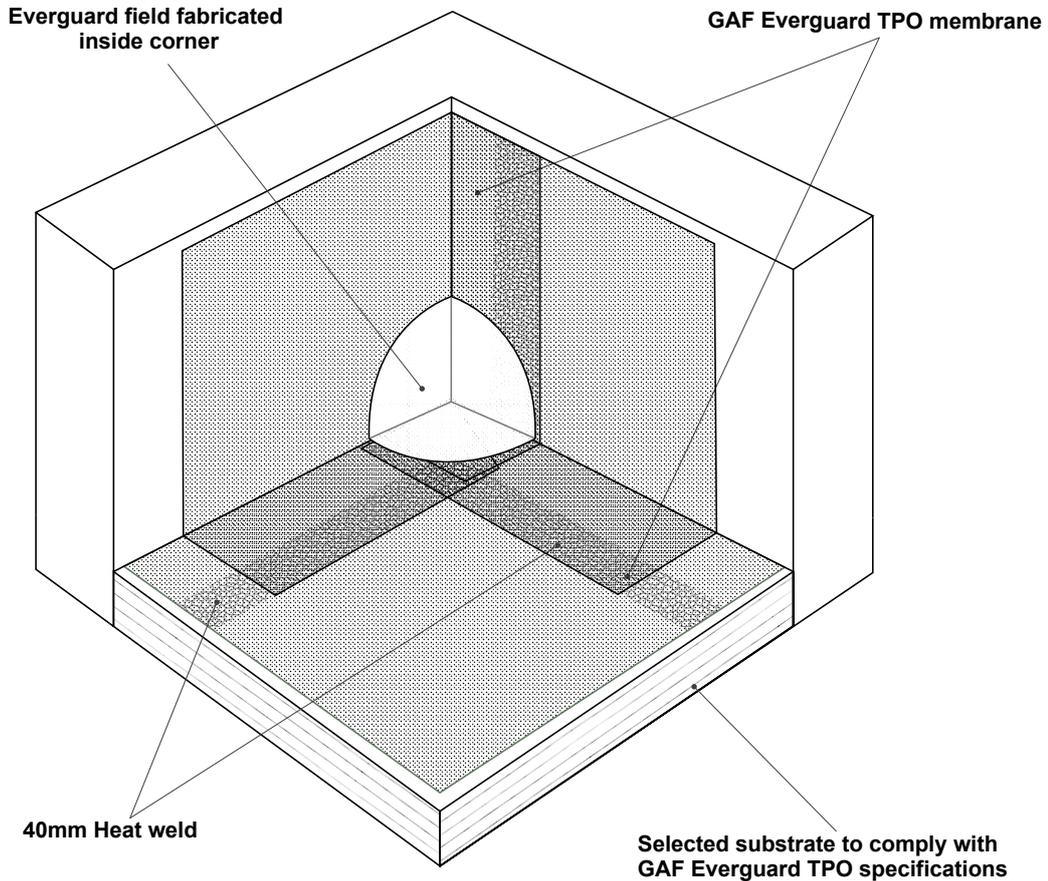
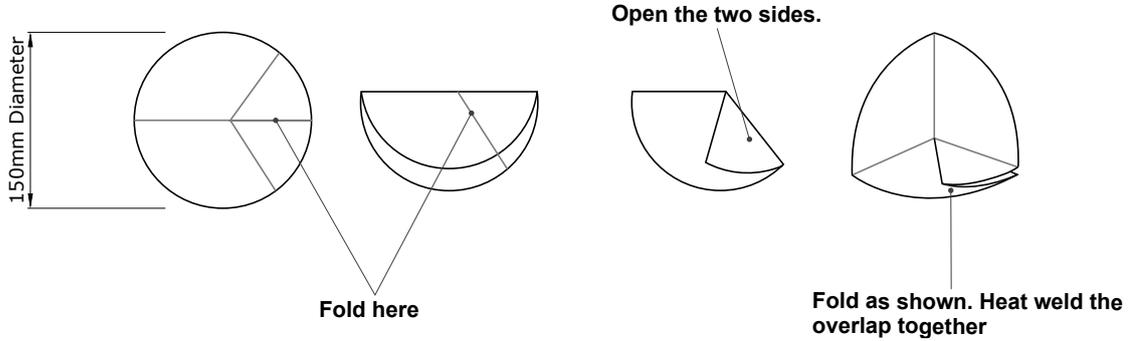
Min 2 degrees fall

Selected substrate to comply with GAF Everguard TPO specifications

	DRAWING: FOLDED INSIDE CORNER	DATE: 10 JUNE 2014	DETAIL: 403	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

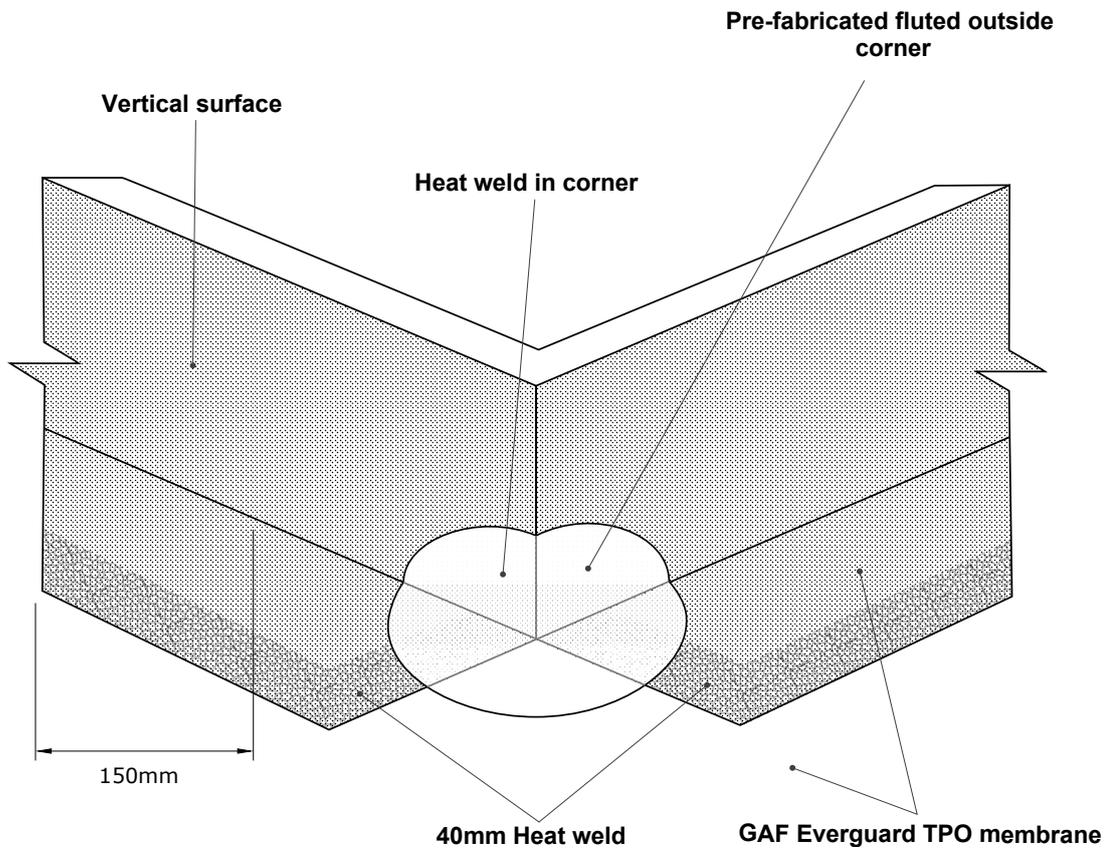
Everguard TPO field fabricated cut from non-reinforced membrane



	DRAWING: FABRICATED INSIDE CORNER	DATE: 10 JUNE 2014	DETAIL: 404	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

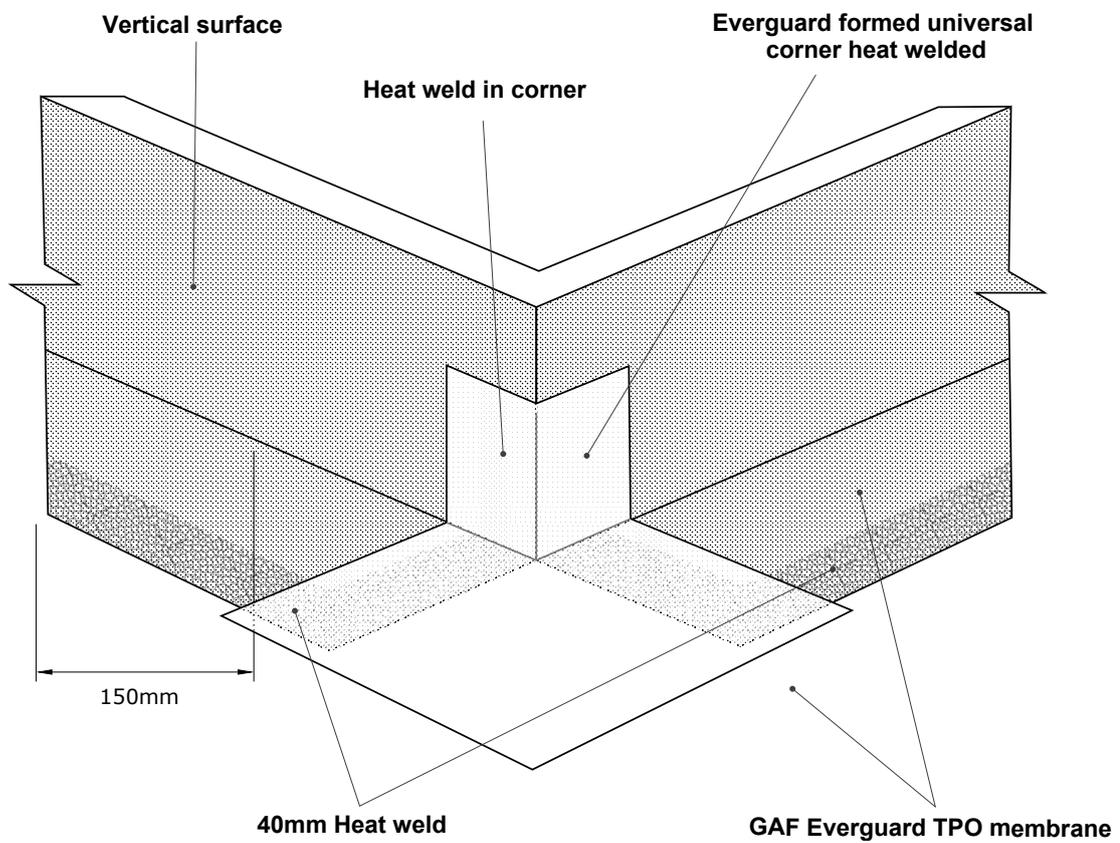
Seal cut edges of Everguard TPO membrane



	DRAWING: FLUTED OUTSIDE CORNER	DATE: 10 JUNE 2014	DETAIL: 405	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

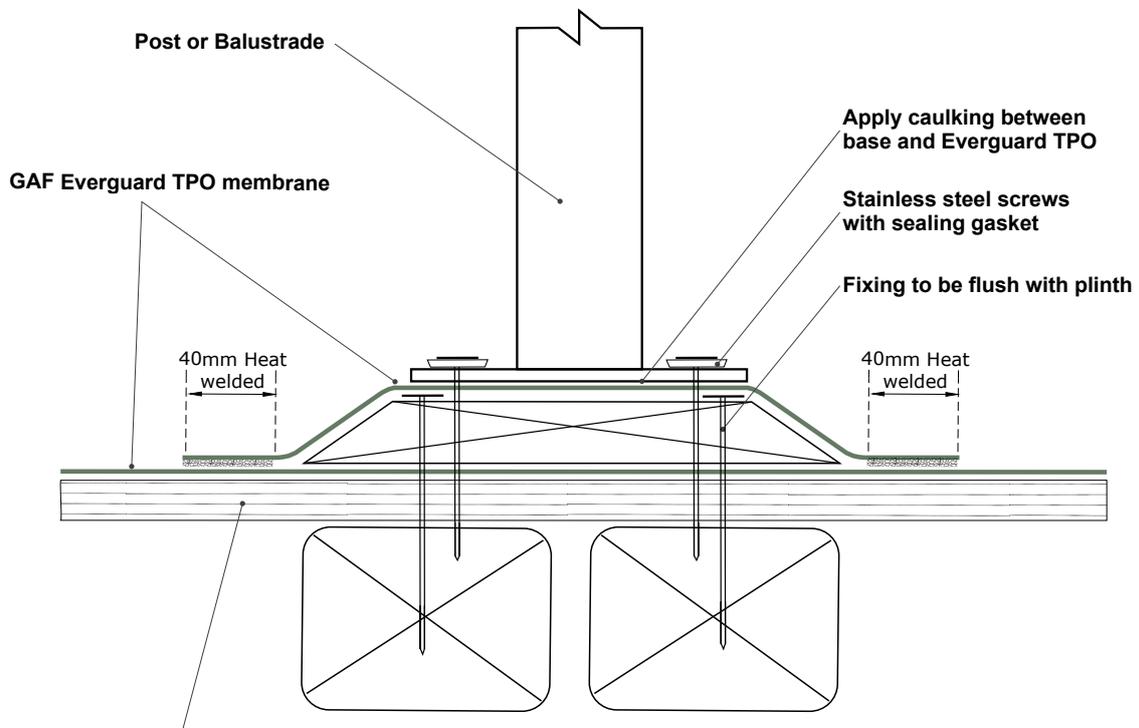
Seal cut edges of Everguard TPO membrane



	DRAWING: WALL / CURB OUTSIDE CORNER	DATE: 10 JUNE 2014	DETAIL: 406	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

Seal cut edges of Everguard TPO membrane



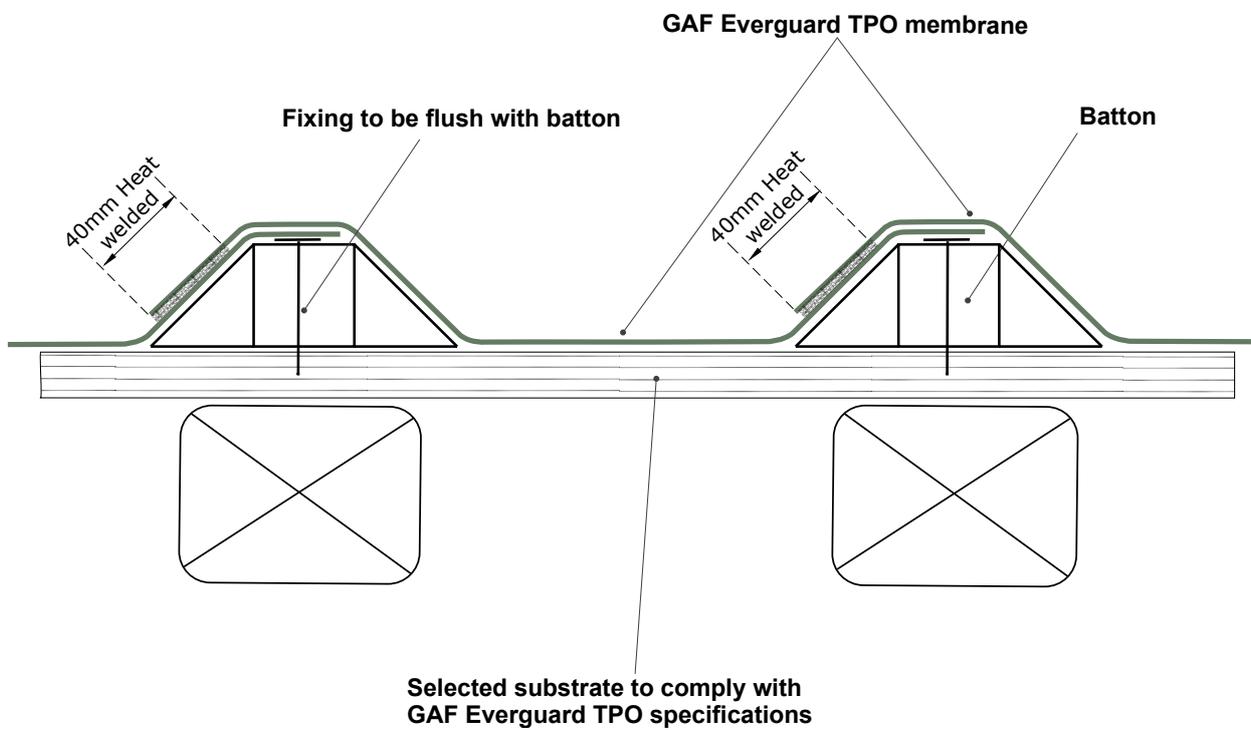
Selected substrate to comply with GAF Everguard TPO specifications

COMMERCIAL BUILDING - SPECIFIC DESIGN

	DRAWING: POST OR BALUSTRADE BASE	DATE: 6 DEC 2019	DETAIL: 407	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

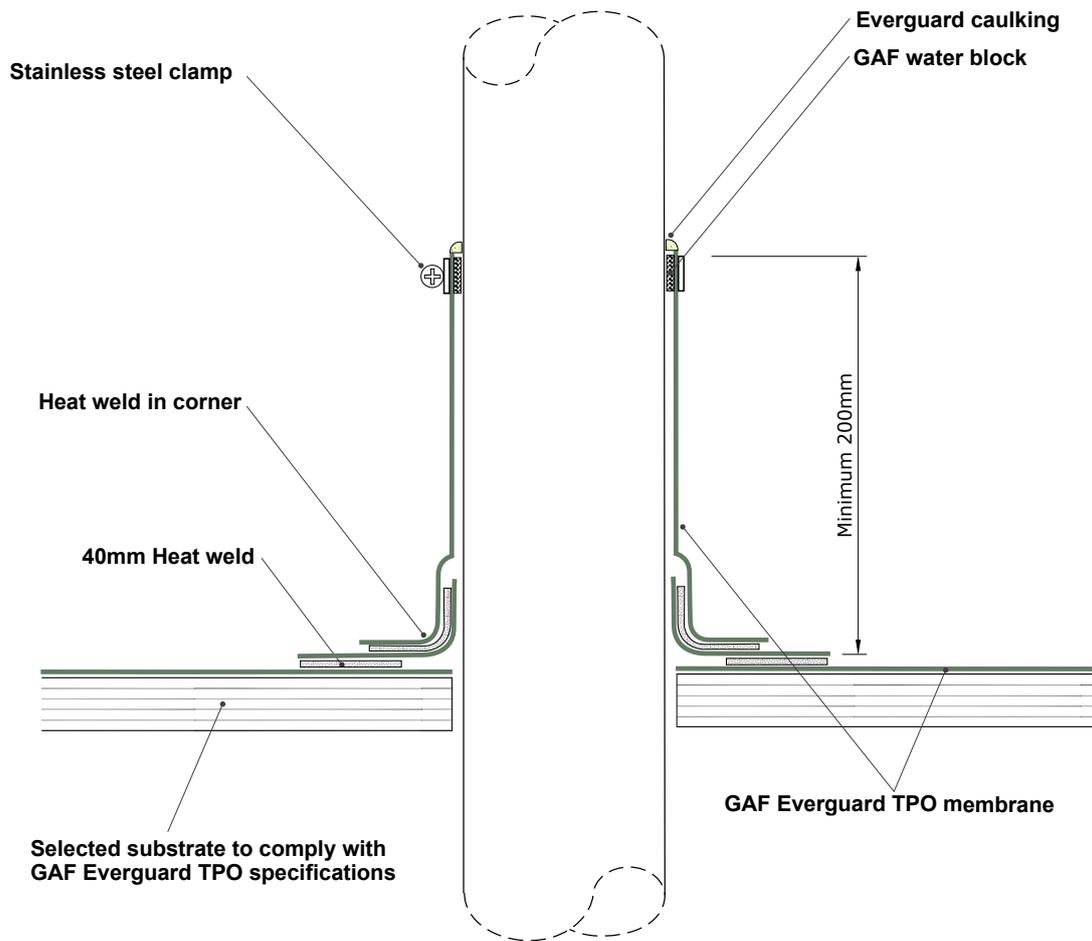
Seal cut edges of Everguard TPO membrane



	DRAWING: DRESSED BATTEN	DATE: 10 JUNE 2014	DETAIL: 408	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

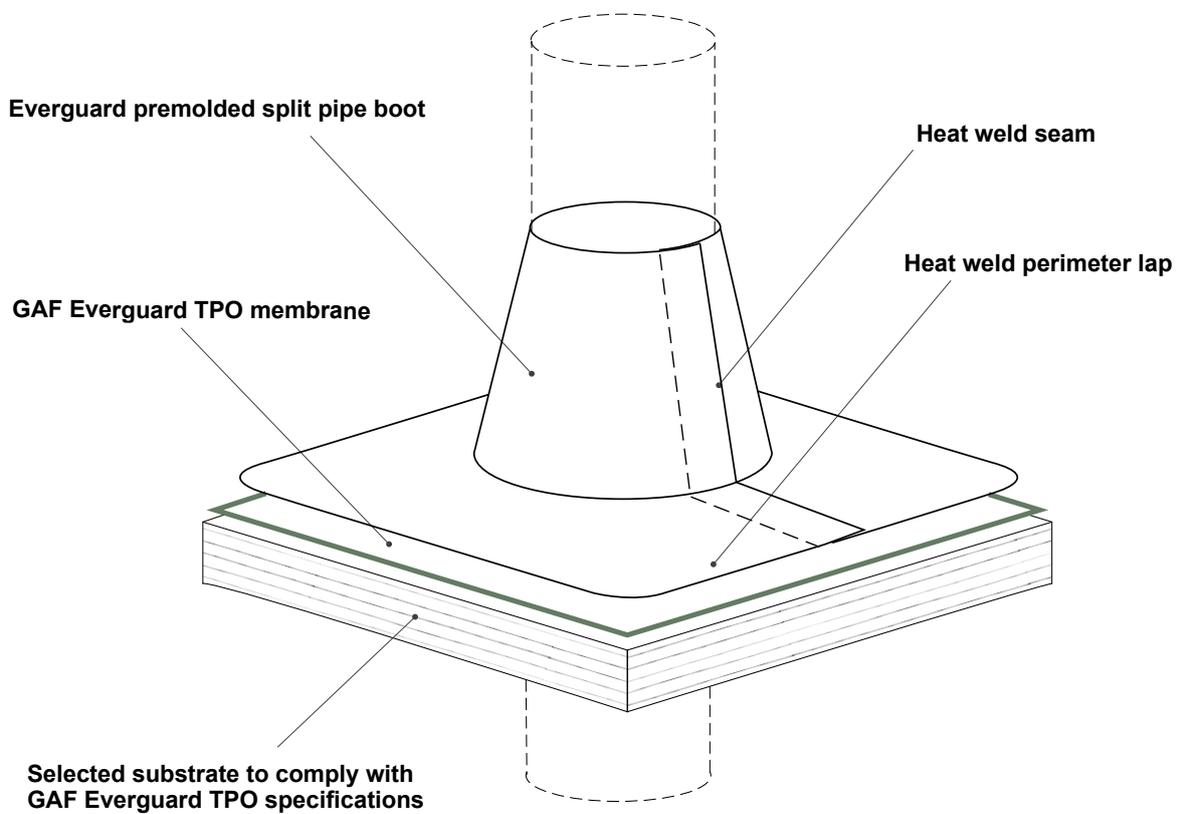
Seal cut edges of Everguard TPO membrane



	DRAWING: PIPE PENETRATION	DATE: 10 JUNE 2014	DETAIL: 501	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

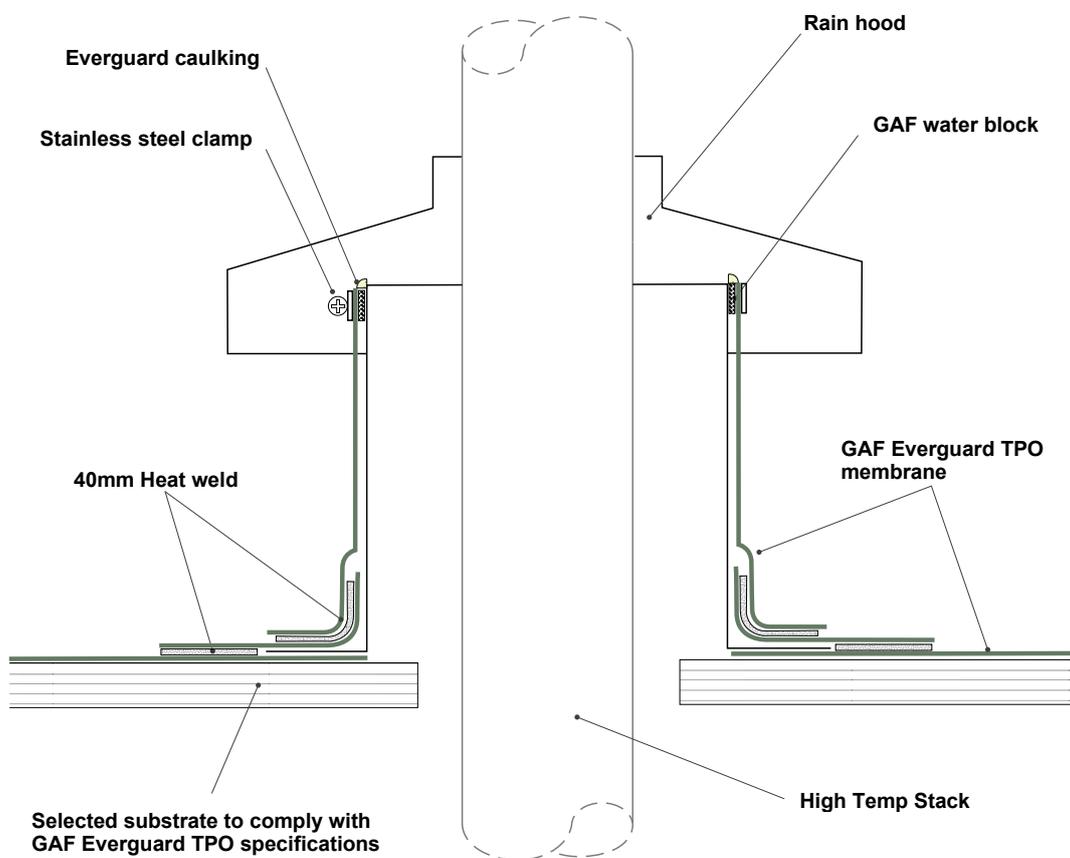
Seal cut edges of Everguard TPO membrane



	DRAWING: SPLIT PIPE BOOT	DATE: 10 JUNE 2014	DETAIL: 502	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

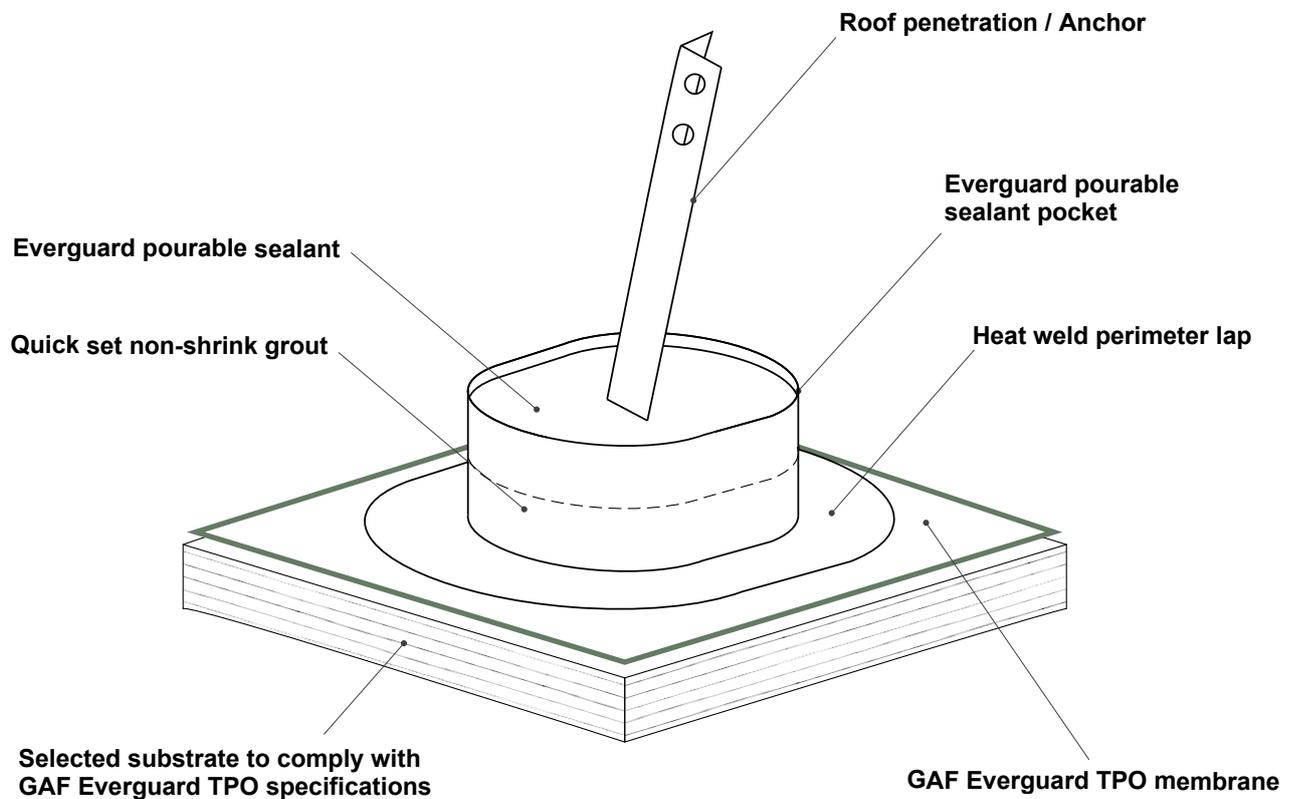
Seal cut edges of Everguard TPO membrane



	DRAWING: HIGH TEMP STACK FLASHING	DATE: 10 JUNE 2014	DETAIL: 503	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

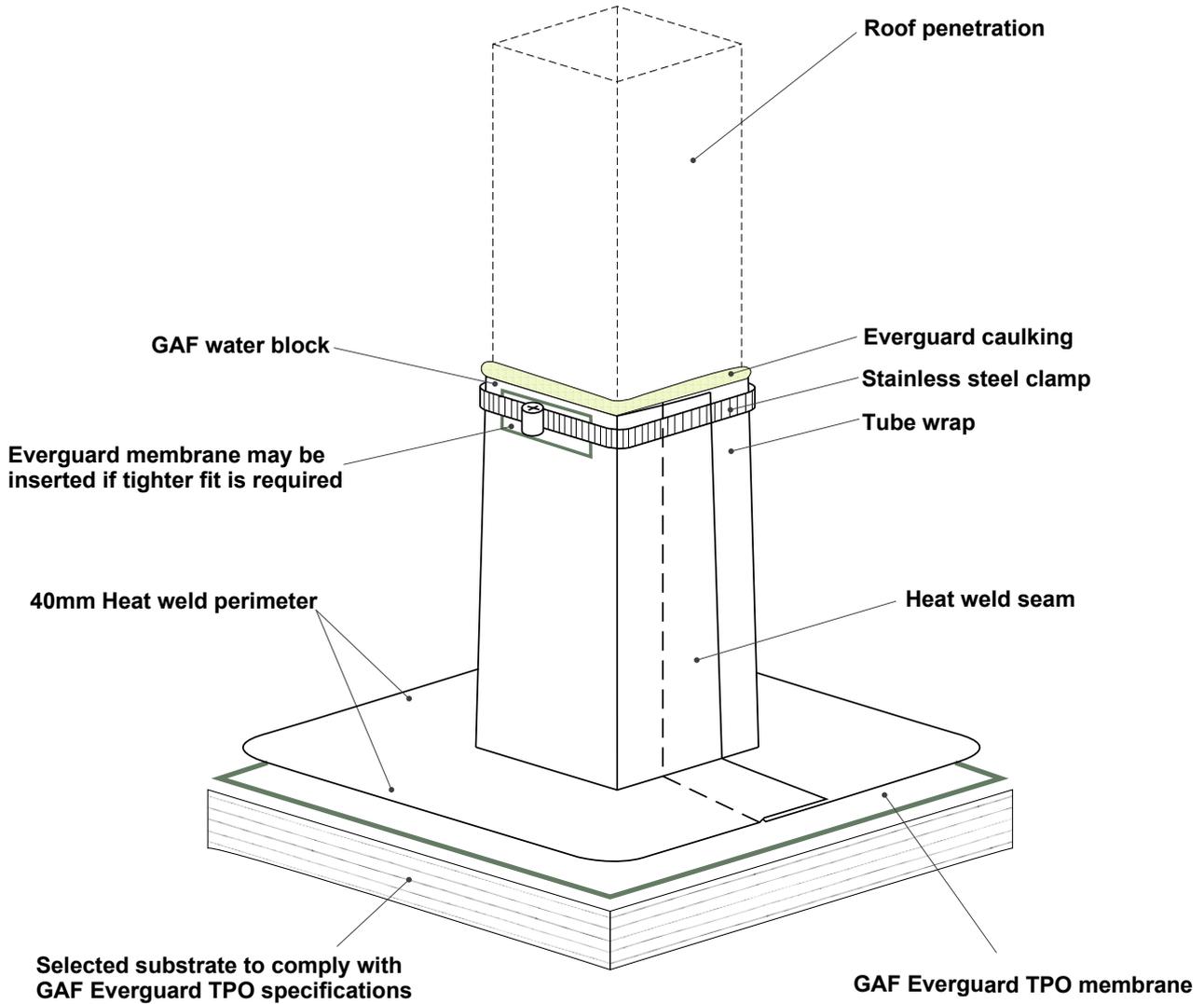
Seal cut edges of Everguard TPO membrane



	DRAWING: POURABLE SEALANT POCKET	DATE: 10 JUNE 2014	DETAIL: 504	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

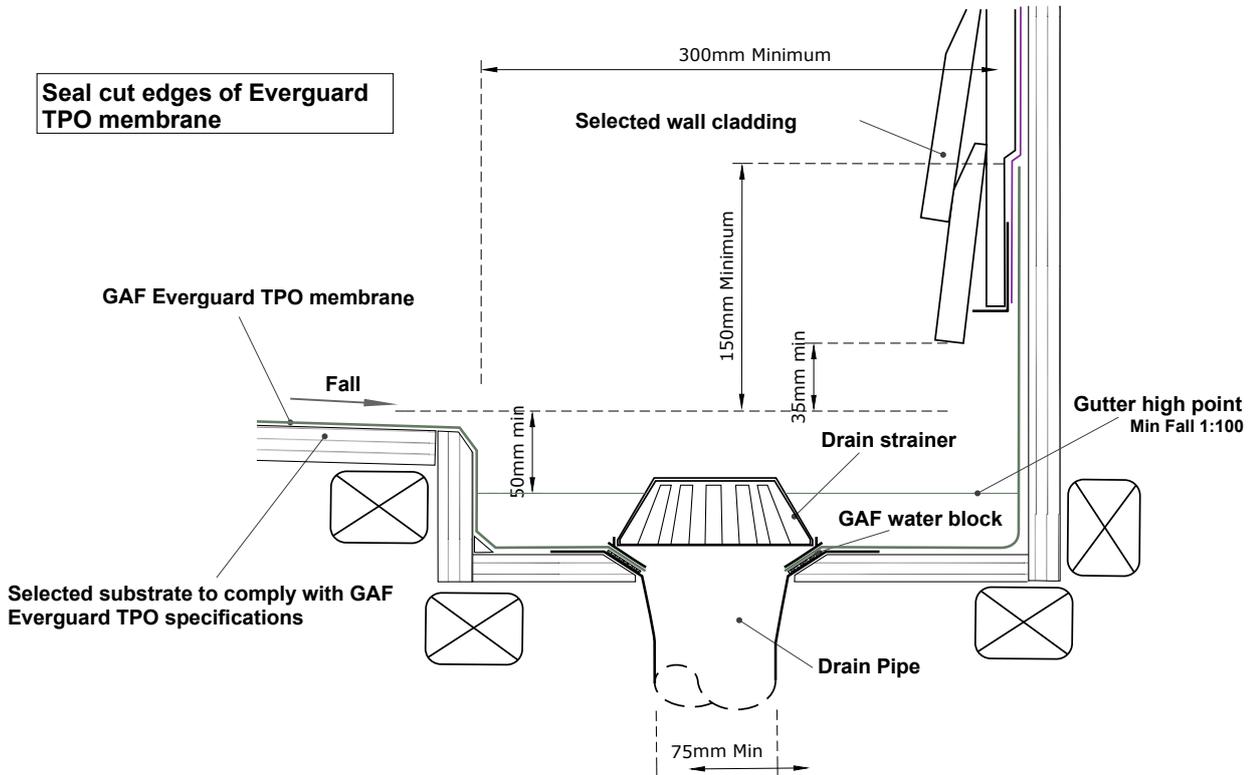
CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

Seal cut edges of Everguard TPO membrane

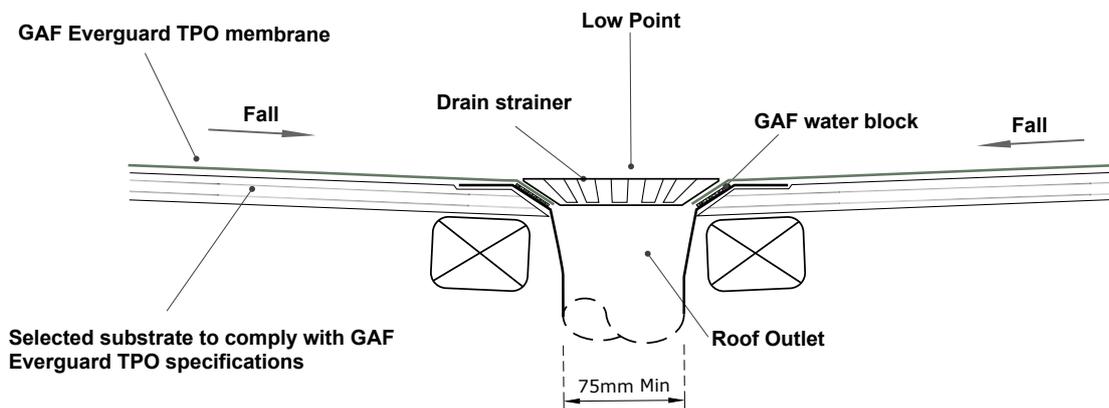


	DRAWING: SQUARE TUBE WRAP	DATE: 10 JUNE 2014	DETAIL: 505	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



Drain / Dropper

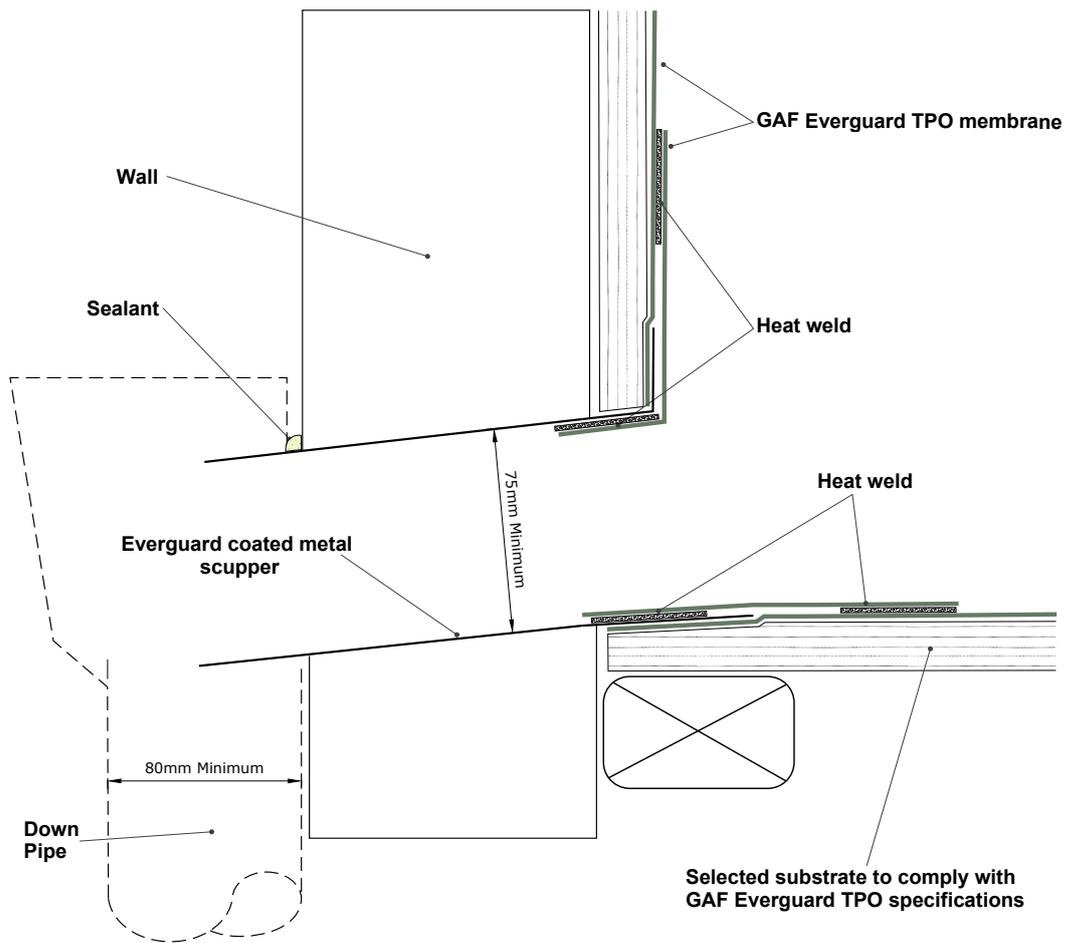


Low Point Outlet

	DRAWING: DRAIN / DROPPER	DATE: 10 JUNE 2014	DETAIL: 506	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

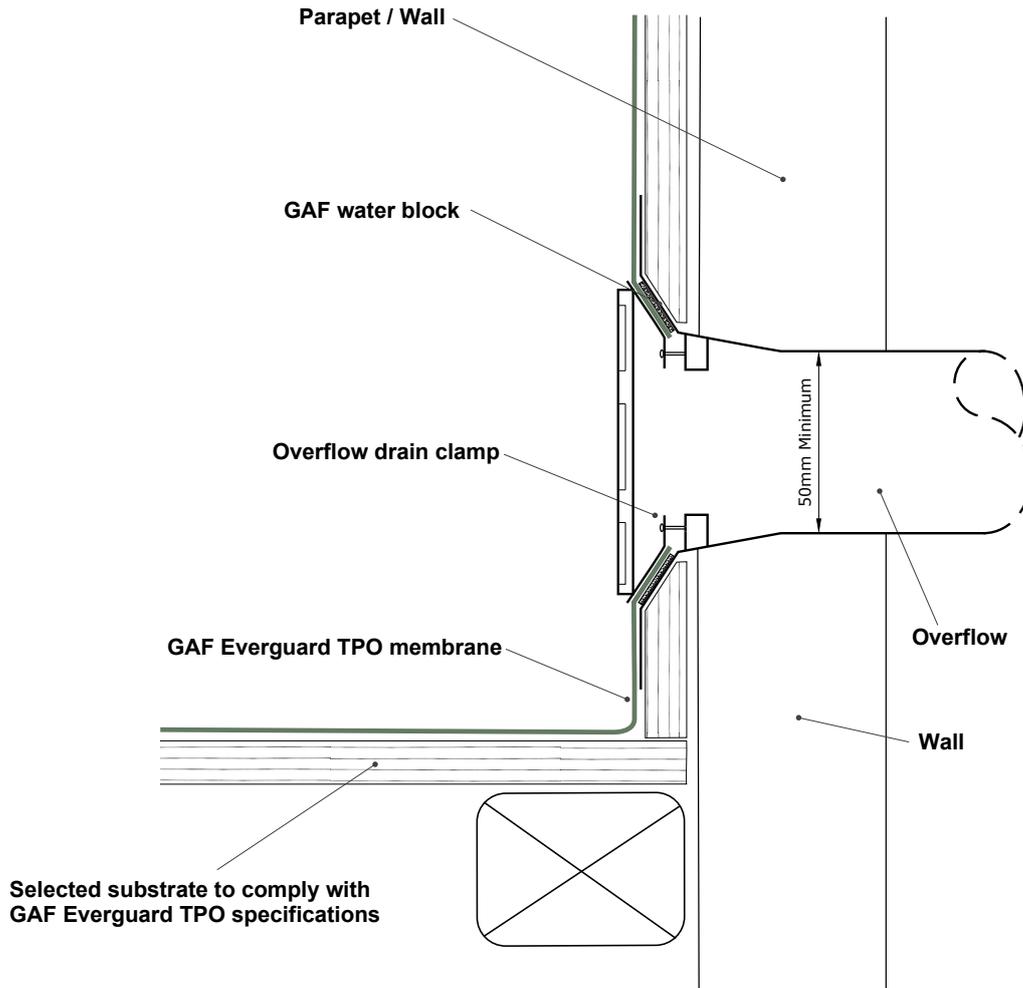
Seal cut edges of Everguard TPO membrane



	DRAWING: COATED METAL SCRUPPER	DATE: 10 JUNE 2014	DETAIL: 507	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

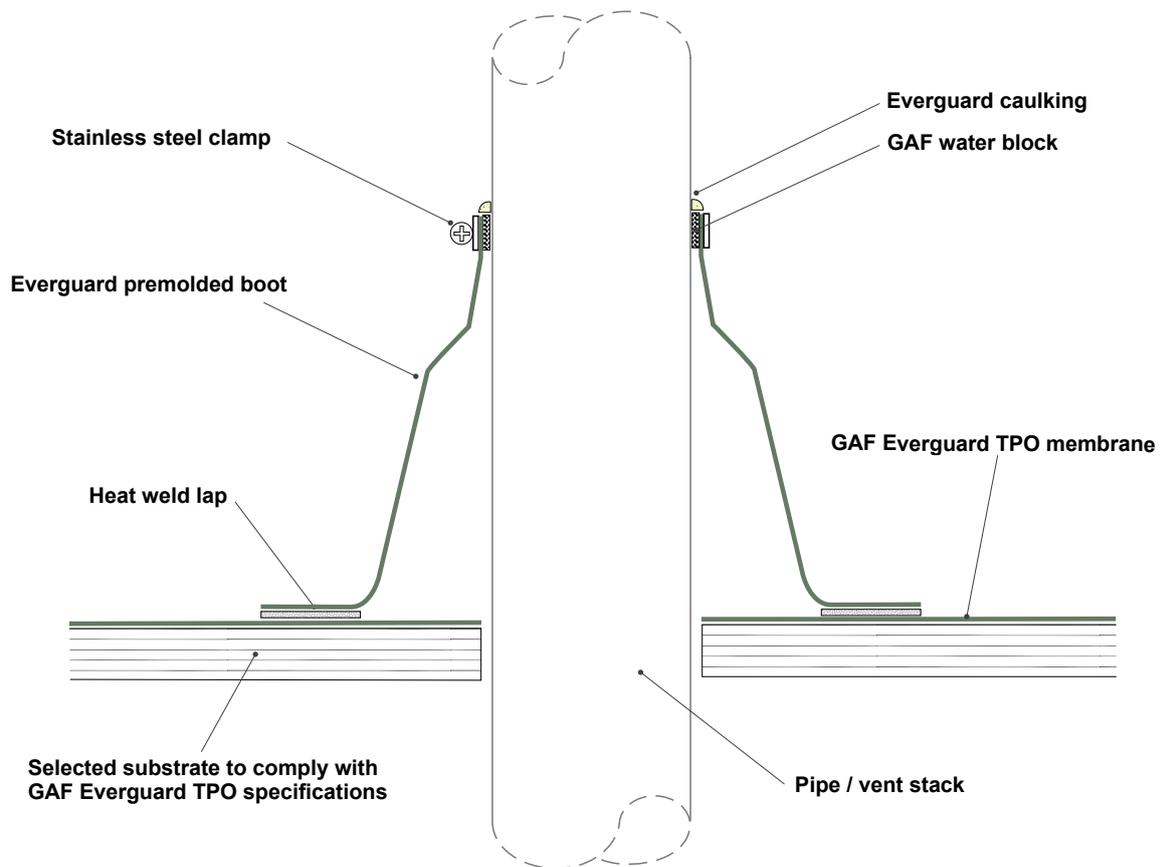
CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

Seal cut edges of Everguard TPO membrane



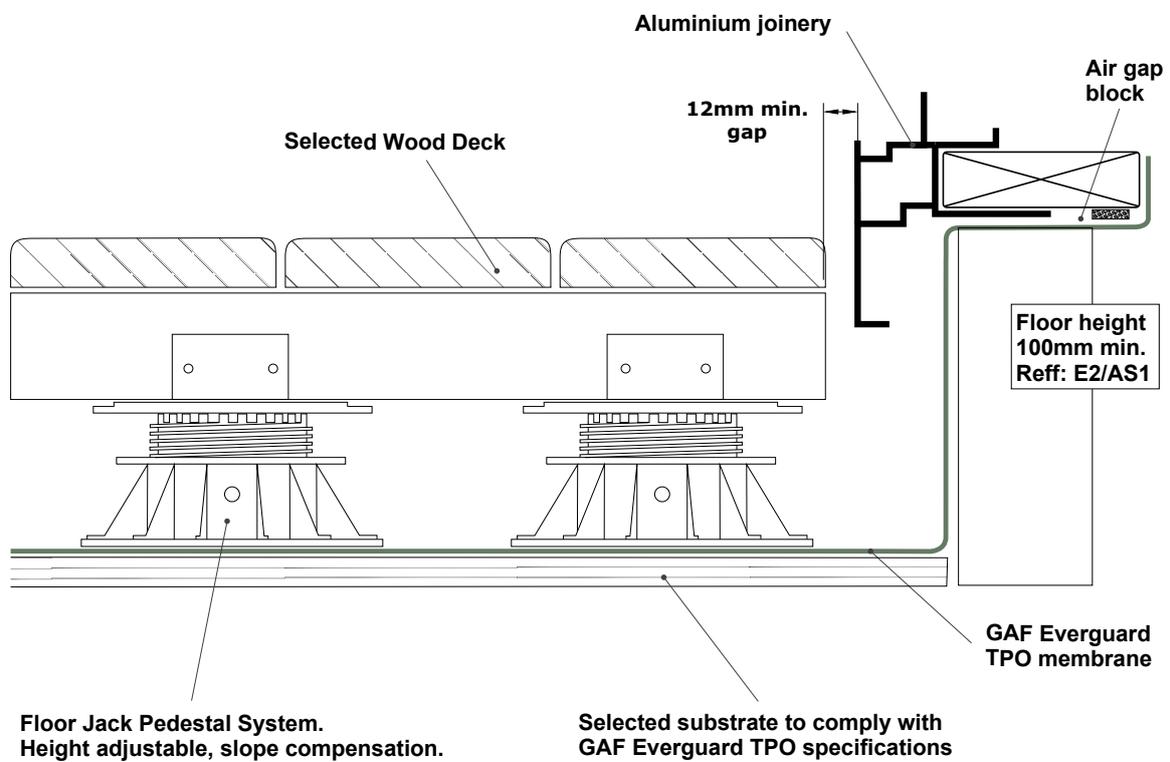
	DRAWING: OVERFLOW PARAPET DRAIN	DATE: 10 JUNE 2014	DETAIL: 508	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



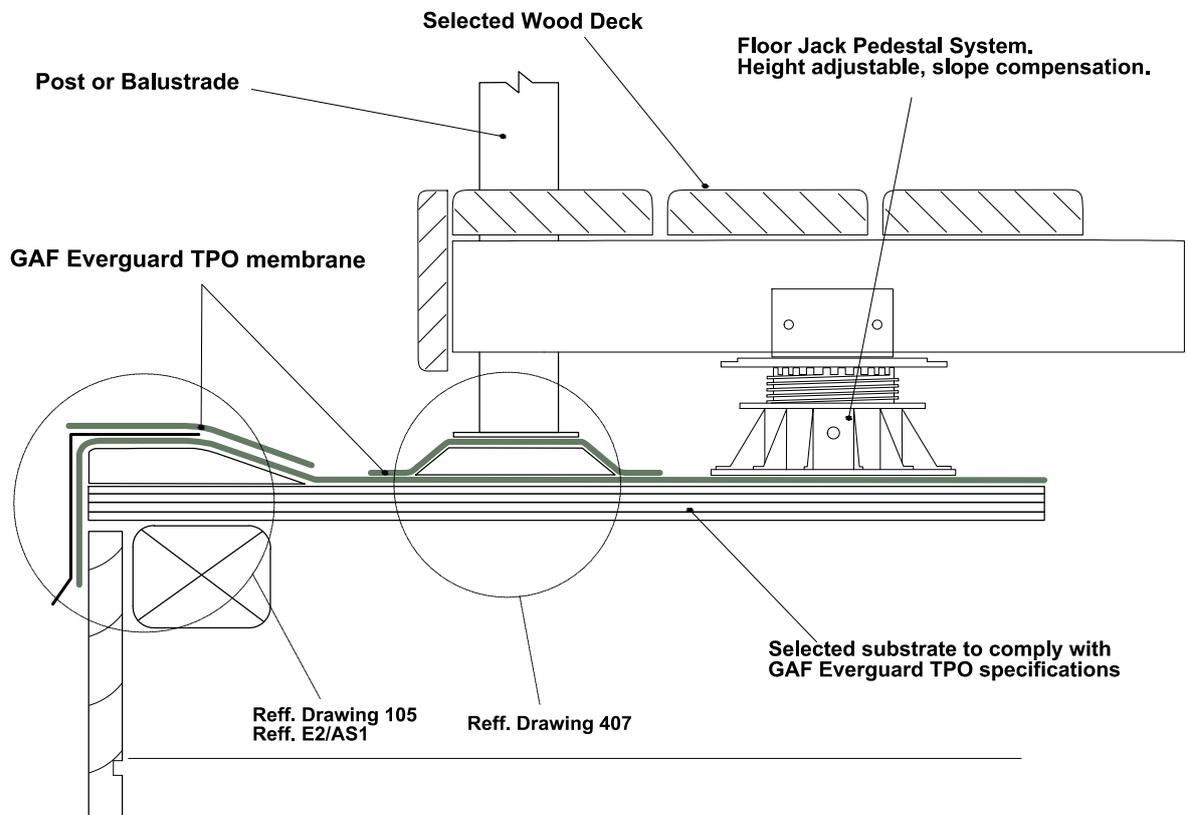
	DRAWING: PREMOLDED PIPE BOOT	DATE: 10 JUNE 2014	DETAIL: 509	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



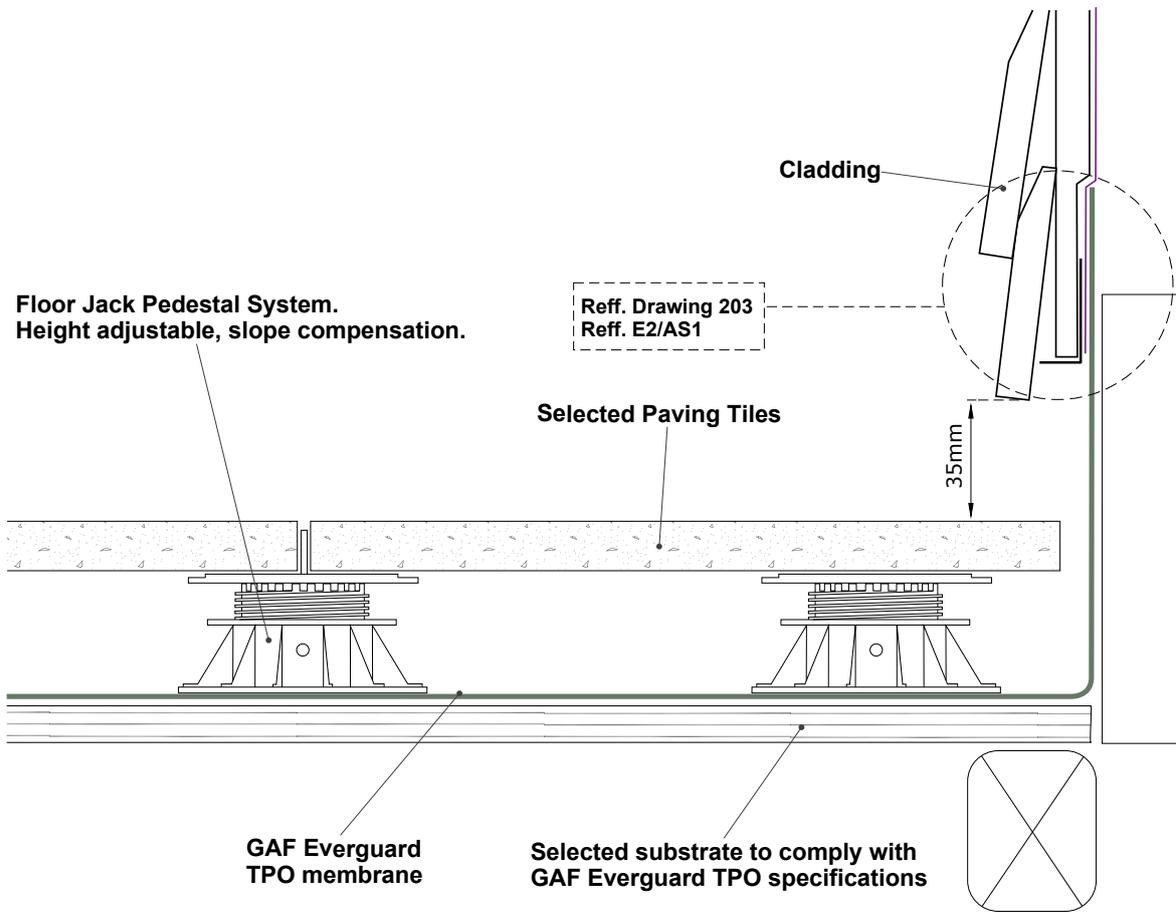
	DRAWING: FLOOR JACK PEDESTAL - DECK	DATE: 10 JUNE 2014	DETAIL: 601	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



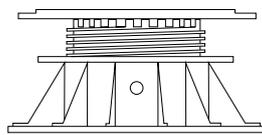
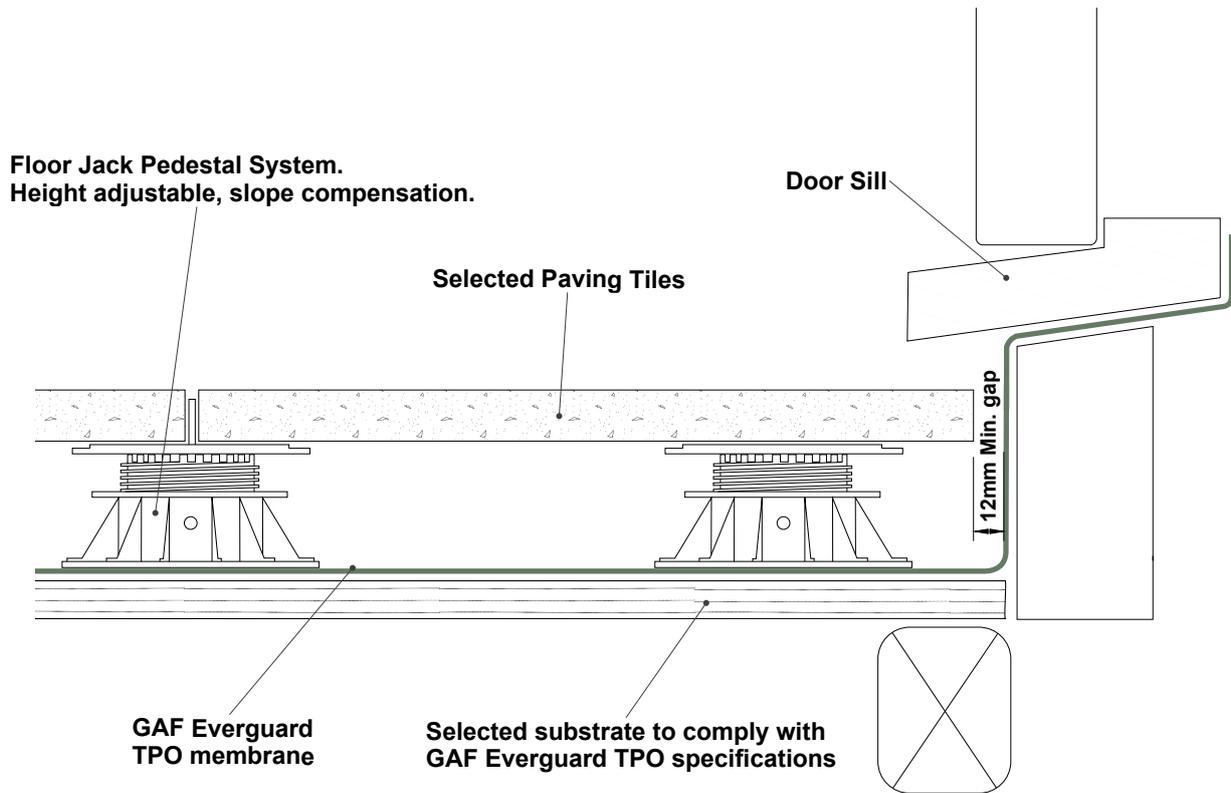
	DRAWING: FLOOR JACK PEDESTAL - TERMINATION	DATE: 10 JUNE 2014	DETAIL: 602	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'

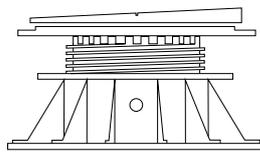


	DRAWING: FLOOR JACK PEDESTAL - PAVING TILES	DATE: 10 JUNE 2014	DETAIL: 603	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		

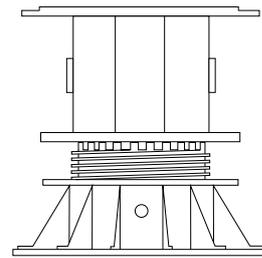
CONSTRUCTION DETAILS FOR 'GAF TPO SINGLE-PLY ROOFING SYSTEM'



Floor Jack Pedestal



Floor Jack Pedestal slope compensation.



Floor Jack Pedestal Height Extension.

	DRAWING: FLOOR JACK PEDESTAL - DOOR SILL	DATE: 10 JUNE 2014	DETAIL: 604	 BRANZ Appraised Appraisal No 529
	DETAILS FOR: EVERGUARD TPO ROOFING	SCALE: N/A		