

Neuchâtel Single Ply Roofing



PVC SINGLE PLY
ROOFING AND
WATERPROOFING
SYSTEMS

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WE ARE NEUCHÂTEL

For the last 120 years, Neuchâtel has helped countless architects and construction professionals in New Zealand to protect their buildings with advanced, durable structural waterproofing systems.

From Neuchâtel Mastic Asphalt to technical waterproofing membranes, for cold, warm or green roofs, floors, walls, paving and carparks, Neuchâtel has a proven solution for the entire building envelope. Our products are designed and engineered to handle New Zealand's unique conditions, high rainfall, and the ongoing challenges of climate change.



Fabric Apartments. Onehunga - Ashton Mitchell

WHO is IKO?

IKO is Neuchâtel's trusted international manufacturing product partner. With more than 140 years' experience, IKO is firmly established as the UK's market leader in roofing, waterproofing and insulation solutions. This hard-earned reputation has been built on a foundation of high quality products, exemplary customer service and an unwavering commitment to driving positive change and protecting what matters. With this comes a responsibility to continue investing in product solutions, manufacturing facilities and extensive team of experts to deliver excellence at every level.

MANUFACTURED IN THE UK. MADE FOR THE FUTURE.

As the only UK manufacturer of single ply PVC membranes, IKO offers a complete range of single ply roofing and waterproofing systems and complementary components to deliver high performance, long-lasting flat roof solutions. Tried and trusted in the roofing industry, Neuchâtel Armourplan Single Ply Roofing membranes are CodeMark certified. Our robust and reliable systems are manufactured in IKO's state-of-the-art production facility in Chesterfield, which has BS EN ISO 9001, BS EN ISO 14001 and BES 6001 accreditations.

All Neuchâtel projects are regularly monitored during installation by our dedicated Technical Services department, helping maintain full specification compliance and ensuring any site queries are handled quickly and effectively.

Neuchâtel also provide dedicated project design support. The Neuchatel team is on hand to provide specification advice, technical drawings, wind uplift and thermal calculations, site visits and post-project support, such as maintenance and comprehensive guarantees – a comprehensive service that is all free of charge.



NEUCHÂTEL ARMOURPLAN REINFORCED PVC SINGLE PLY ROOFING MEMBRANES

Suitable for use on a wide range of roofing applications, including specialist installations.

Neuchâtel Armourplan PVC Single Ply roofing membranes are CodeMark certified (CMNZ70094) have been independently approved by the British Board of Agrément (BBA No. 05/4287) and provide durable and dependable roof waterproofing with a service life of up to 40 years.

Neuchâtel Armourplan Single Ply roofing systems offer many benefits including:

-  Exceptional mechanical performance
-  Long service life
-  Choice of colours
-  High UV resistance
-  Sleek finish
-  Secure seam welding quality
-  Complete range of fixings and accessories
-  Proven track record



THE NEUCHÂTEL ARMOURPLAN SINGLE PLY ROOFING RANGE

The Neuchâtel Armourplan Single Ply Roofing range consists of versatile membranes that provide exceptional mechanical performance and weld joint strength, and can be mechanically fixed, adhered or ballasted. The membranes are suitable for warm, cold or ballasted roof systems and come in two standard colours; mid grey (RAL 7046) and slate grey (RAL 7015). However, other colours are available upon request*.

**Minimum volumes and extended lead times required for non-standard colours.*



Membranes

Neuchâtel Armourplan P

A polyester reinforced membrane for use in a wide range of roofing applications on both flat and sloping roofs. Neuchâtel Armourplan P offers enhanced mechanical properties and is completely UV-stable throughout. This membrane can also be used as the upstand detailing membrane on Neuchâtel Armourplan P and PSG systems.

Available in 1.2mm standard thickness.

Neuchâtel Armourplan SM

A polyester reinforced membrane for mechanically fastened roofing systems. It is also used as the upstand detailing membrane on Neuchâtel Armourplan SM and SG systems.

Available in either 1.2mm or 1.5mm standard thicknesses.

Neuchâtel Armourplan PSG

A glass tissue reinforced polyester fleece-backed PVC membrane suitable for both flat and sloping roofs. Adhered onto most common substrates using IKO adhesives. The membrane is completely UV-stable throughout.

Available in 1.2mm standard thickness.

Neuchâtel Armourplan SG

A polyester fleece-backed membrane for bonded roofing systems. The membrane is bonded to the substrate using IKO adhesives.

Available in either 1.2mm or 1.5mm standard thicknesses.

Neuchâtel Armourplan GB

A heavy-duty glass tissue reinforced fleece-backed PVC membrane specifically designed for buried roof systems.

Available in 1.5mm standard thickness.

Neuchâtel Armourplan D

Un-reinforced homogenous membrane for complex detailing.

Neuchâtel Armourplan G

Glass tissue reinforced PVC membrane for complex detailing.

Neuchâtel Armourplan Walkway

PVC membrane with slip resisting surface for use on walkways.

A SINGLE SYSTEM PROVIDER

With Neuchâtel, you benefit from a full roofing system from one single UK-based supplier, IKO. Our product partner IKO offers a complete range of complementary accessories and mechanical fastening systems as well as responsive on-site deliveries, to ensure you have everything you need, when you need it.

Insulation

Our enertherm insulation solutions are manufactured in the UK at our site in Alconbury, Cambridgeshire, with options available to suit any project – from solutions that are thermally efficient to those that offer market-leading compressive strength.

IKO enertherm PIR

IKO enertherm PIR insulation boards are available in a range of thicknesses and with a choice of facings, including mineral glass tissue and tri-ply aluminium multi-layer complex.

Benefits include:

- High performance
- Lightweight
- Dimensionally stable
- Rot resistant
- Thermally efficient



IKO enertherm GOLD

IKO enertherm GOLD is an insulation board with a rigid polyisocyanurate foam core, clad on both sides with a multi-layer gastight aluminium complex.

Benefits include:

- 100% CFC, HCFC or HFC-free
- Comprehensive technical support throughout project
- Full U-Value, CRA design
- Guarantee and peace of mind
- Improved compressive strength
- No shrinking or cold bridging, allowing for longer service life

IKO enertherm tapered insulation

polyisocyanurate foam core, laminated on both sides with a multi-layer gastight aluminium complex facing. IKO's tapered boards can provide falls across a flat roof in accordance with British Standard BS 6229:2018 (Flat roofs with continuously supported flexible waterproof coverings). Project-specific roof designs can be provided by IKO's in-house design team.

Benefits include:

- 100% CFC, HCFC, and HFC-free
- Tapered design service
- Technical support from survey to inspection
- Wide range of board thicknesses available, starting at 30mm
- Standard falls available, other design falls can be manufactured depending on project requirements
- Multi-layer gastight aluminium complex facing, offering greater thermal efficiency
- Compatible with bituminous membrane, single ply, mastic asphalt and cold applied liquid systems
- Top quality multi-layer lamination

ANCILLARY PRODUCTS

Neuchâtel supplies a comprehensive range of complementary ancillaries for Neuchâtel Armourplan Single Ply Roofing systems.

Primers, adhesives and cleaners

From preparing the substrate to cleaning and bonding membranes and insulation, this range helps to ensure optimum installation and long-lasting waterproofing performance.

Detailing and outlets

These prefabricated products are ideal for forming common roof details. Included in the range are various dimensions of rainwater outlet, preformed internal and external corners and rolls of homogenous detailing membrane.

Mechanical fixings and restraint bars

IKOfix is a range of high-quality mechanical fastening systems, including fixings, restraint strips, peelstop bars and flatbars. These solutions enable insulation and waterproof membranes to be fixed to a variety of substrates, such as steel, concrete or timber flat roofs.

Membrane coated metal

Armourplan PVC Membrane Coated Metal and Armourflow Rainwater Management help to form perimeter details quickly and effectively, including drip edges and upstands.

Other complementary products include Armourfold's bespoke gutter lining system, Spectratex Geotextile Separation Layer, Armourplan Standing Seam Profiles and Strike PVC lightning conductor clips.

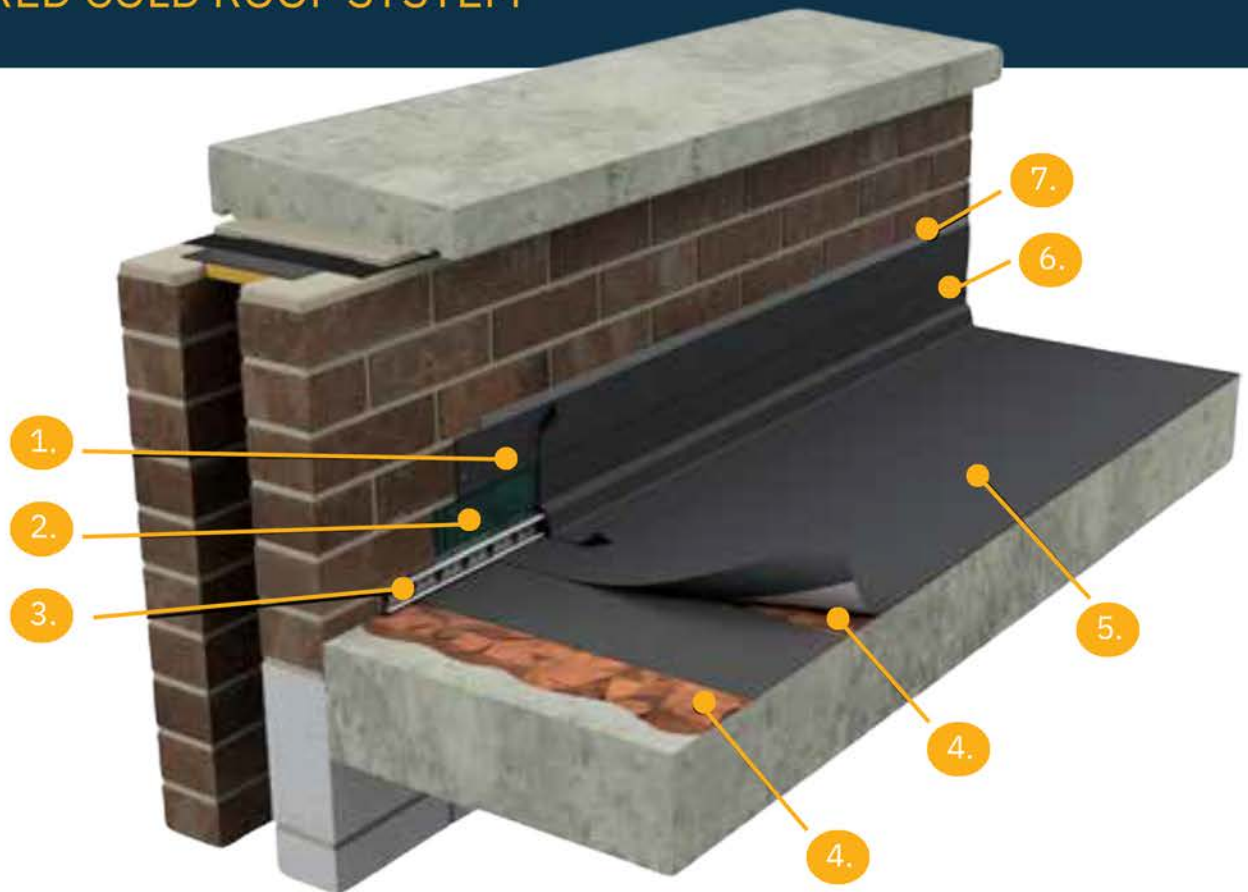


For more information on the membranes, including their benefits, or for a full range of ancillary products, contact Neuchâtel's Technical Services team on: **info@neuchatel.co.nz** or **+64 21 840 660**.



TYPICAL NEUCHÂTEL ARMOURPLAN SINGLE PLY ROOFING BUILD-UPS

ADHERED COLD ROOF SYSTEM



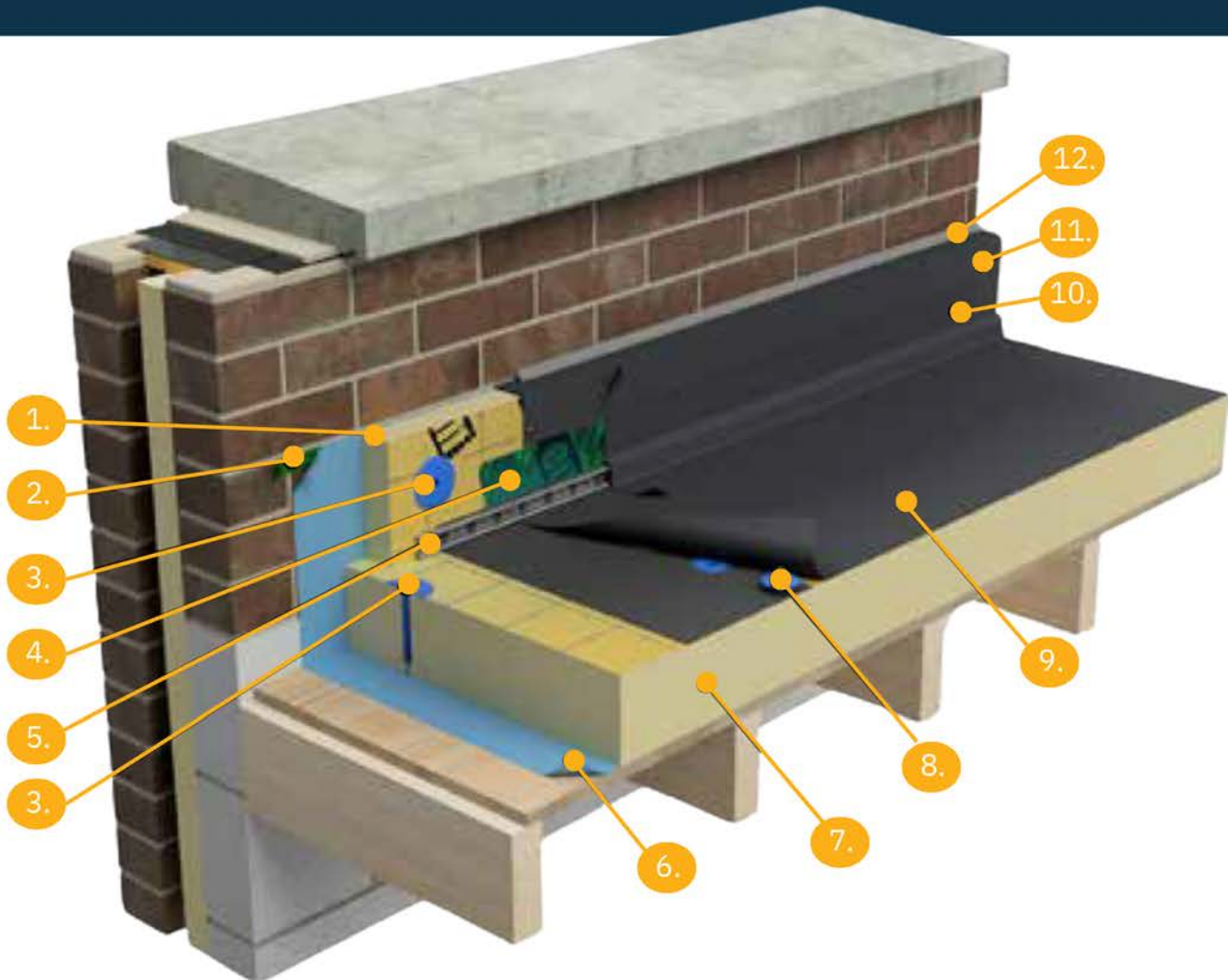
1. Neuchâtel Armourplan Single Ply Roofing Coated Chase Metal
2. PVC Contact Adhesive
3. IKOfix Peel Stop Bar
4. Spectrabond LFPU Membrane Adhesive
5. Neuchâtel Armourplan SG/PSG
6. Neuchâtel Armourplan SM/P Upstand Membrane
7. PVC Sealant

MECHANICALLY FASTENED COLD ROOF SYSTEM



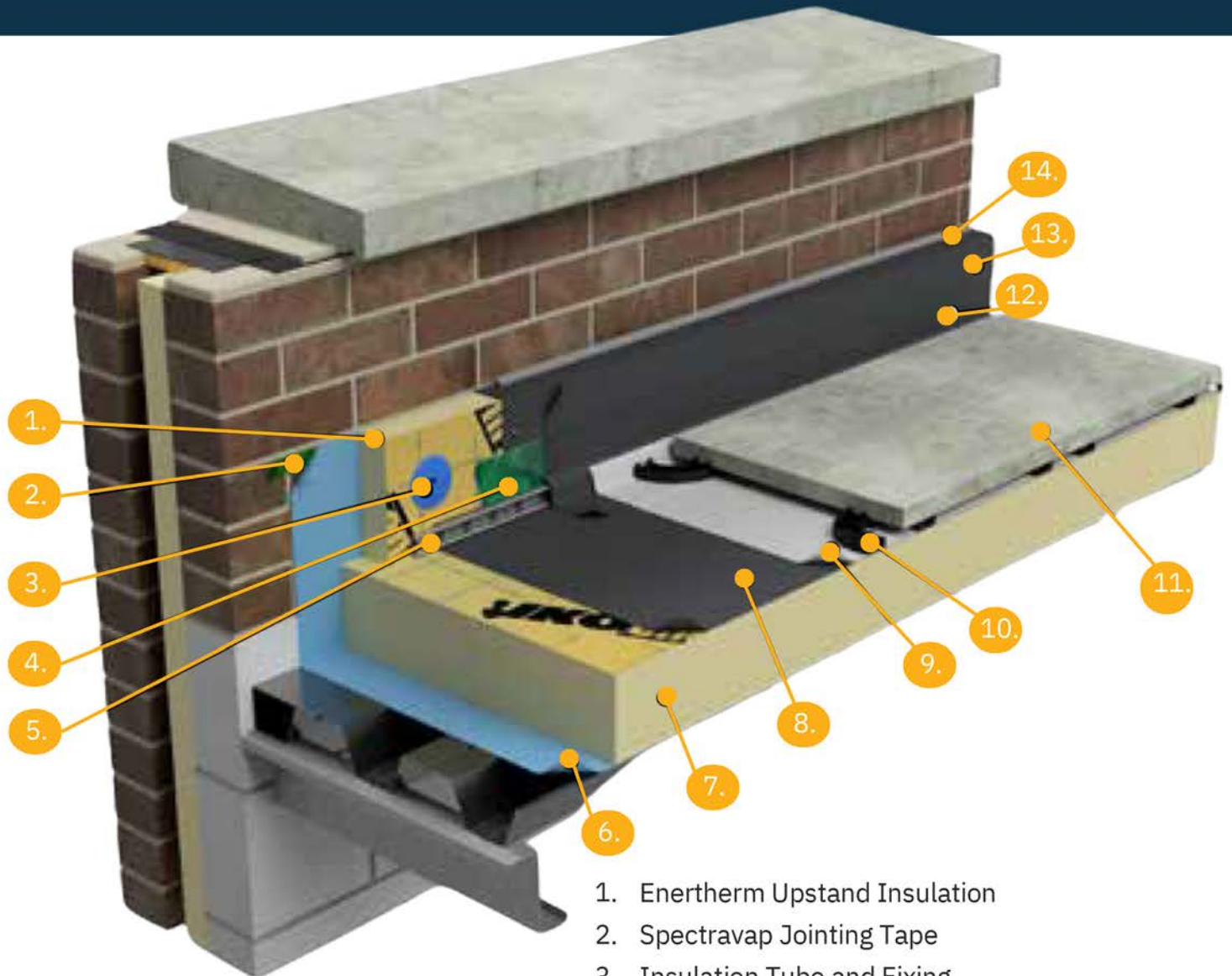
1. Armourplan Coated Chase Metal
2. PVC Contact Adhesive
3. IKOfix Toothed Flat Bar
4. IKOfix Membrane Pressure Plate and Fixings
5. Neuchâtel Armourplan SM/P
6. Neuchâtel Armourplan SM/P Upstand Membrane
7. PVC Sealant

MECHANICALLY FASTENED WARM ROOF SYSTEM



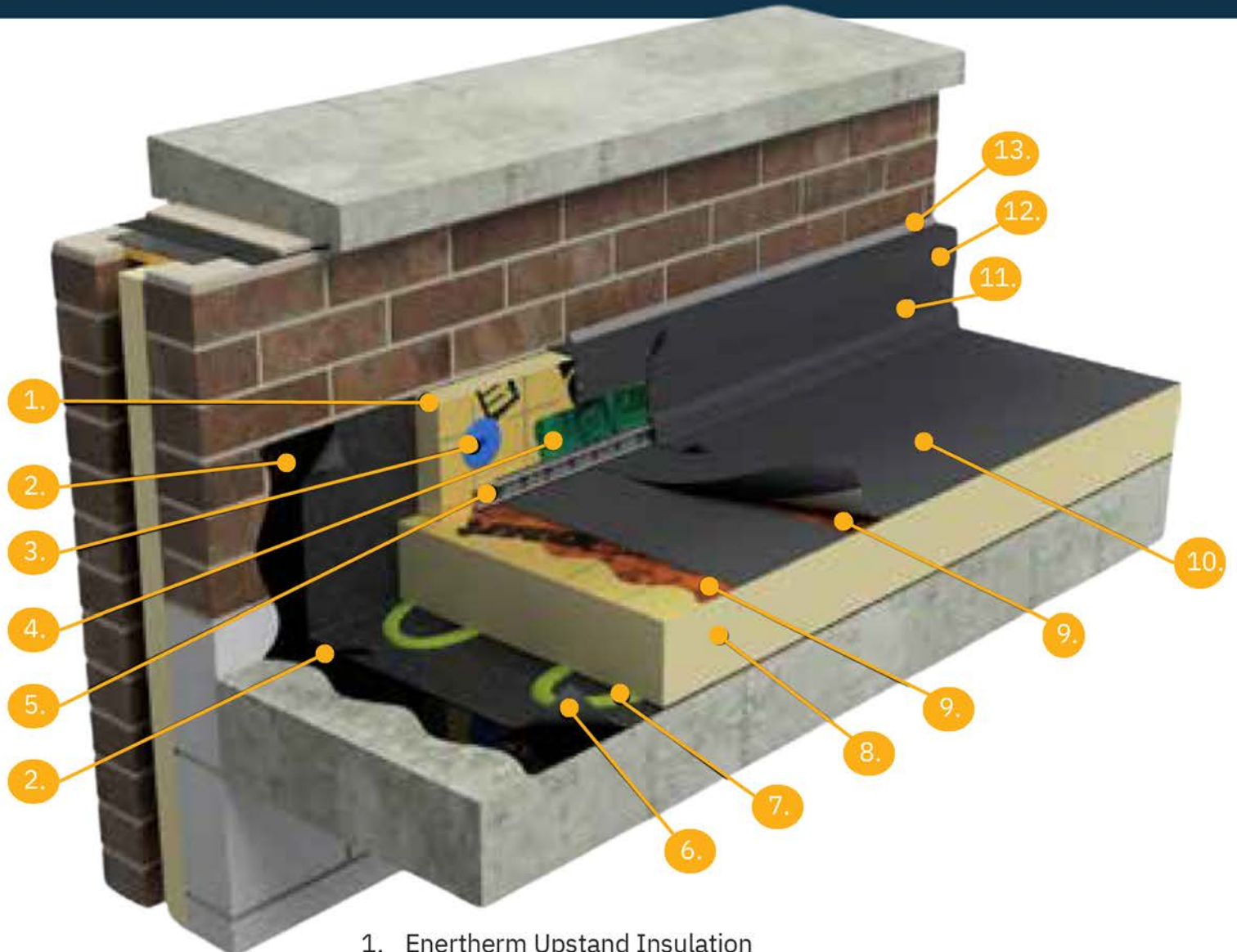
1. Enertherm Upright Insulation
2. Spectravap Jointing Tape
3. Insulation Tube and Fixing
4. PVC Contact Adhesive
5. Toothed Flat Bar
6. Spectravap AVCL
7. Enertherm Insulation
8. Membrane Tube and Fixings
9. Neuchâtel Armourplan SM/P Membrane
10. Neuchâtel Armourplan SM/P Upright Membrane
11. Neuchâtel Armourplan Coated Chase Metal
12. PVC Sealant

BALLAST WARM ROOF SYSTEM



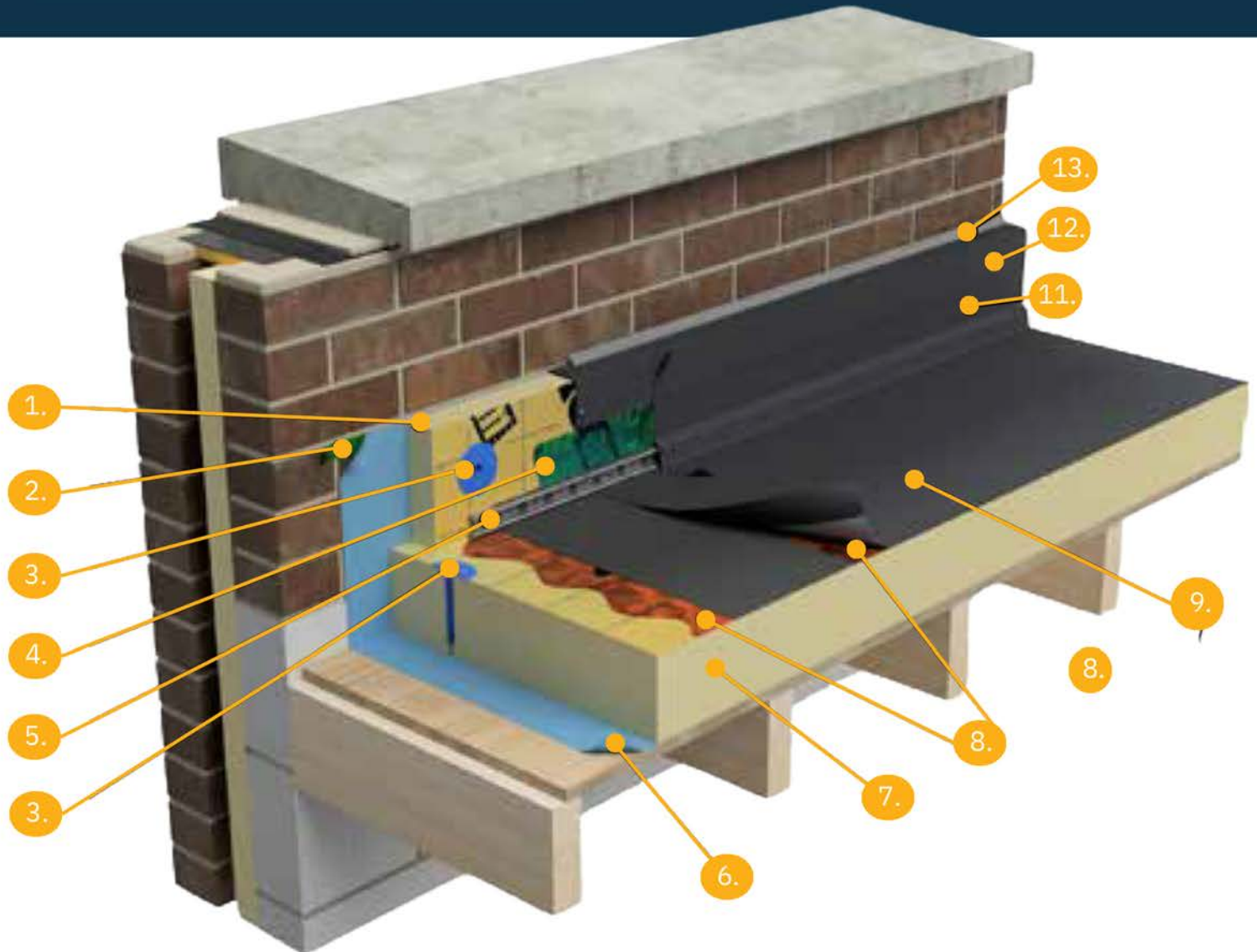
1. Enertherm Upstand Insulation
2. Spectravap Jointing Tape
3. Insulation Tube and Fixing
4. PVC Contact Adhesive
5. Toothed Flat Bar
6. Spectravap AVCL
7. Enertherm Insulation
8. Neuchâtel Armourplan Membrane
9. Spectratex Protective Fleece
10. Paving Support Pad
11. Ballast
12. Neuchâtel Armourplan SM/P Upstand Membrane
13. Neuchâtel Armourplan Coated Chase Metal
14. PVC Sealant

ADHERED WARM ROOF SYSTEM

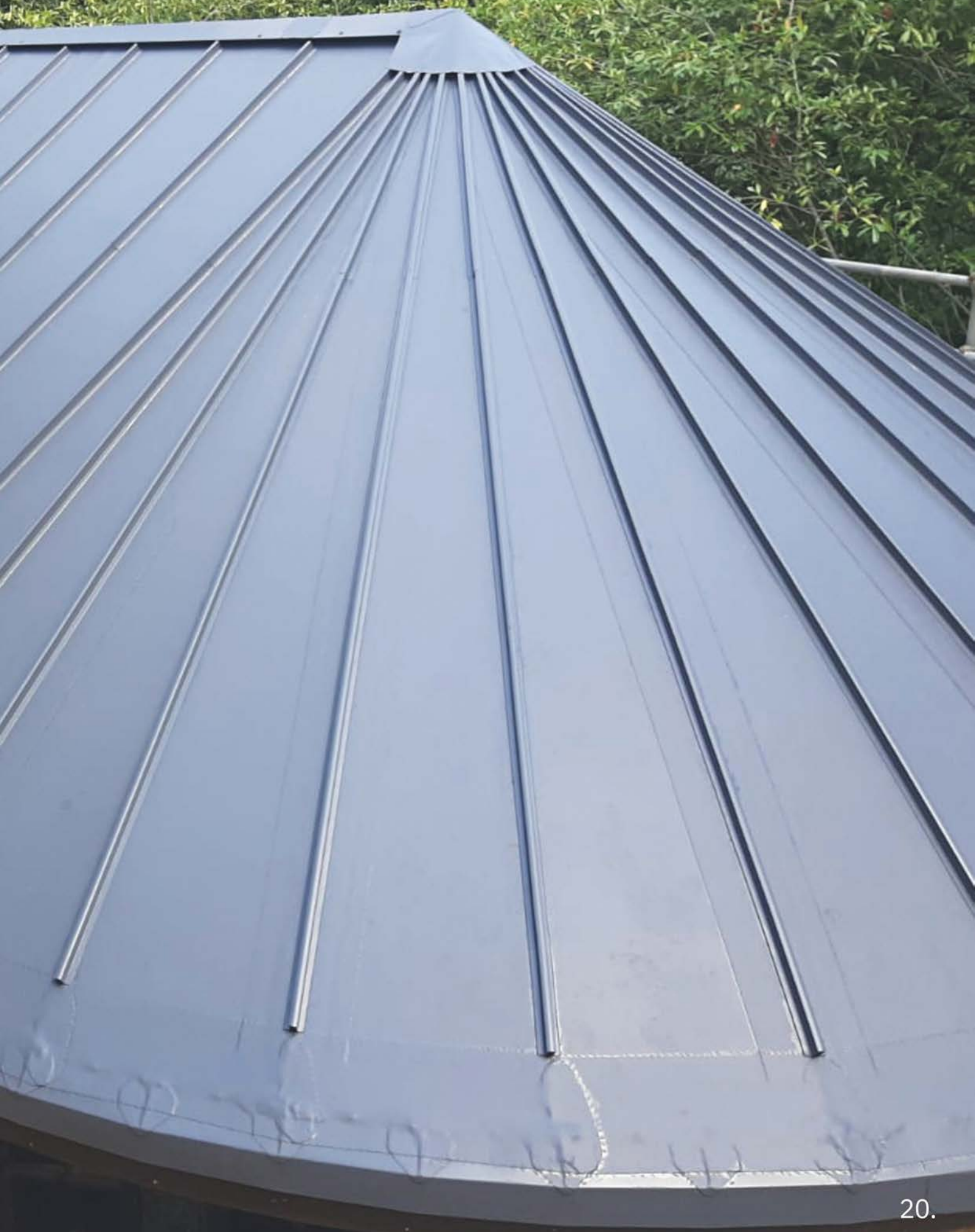


1. Enertherm Upstand Insulation
2. Bitumen Primer
3. Insulation Tube and Fixing
4. PVC Contact Adhesive
5. Peel Stop Bar
6. Ultra Bituminous AVCL
7. HPPU Insulation Adhesive
8. Enertherm Insulation
9. Spectrabond LFPU Membrane Adhesive
10. Neuchâtel Armourplan SG/PSG Membrane
11. Neuchâtel Armourplan SM/P Upstand Membrane
12. Neuchâtel Armourplan Coated Chase Metal
13. PVC Sealant

HYBRID WARM ROOF SYSTEM



1. Enertherm Uprand Insulation
2. Spectravap Jointing Tape
3. Insulation Tube and Fixing
4. PVC Contact Adhesive
5. Peel Stop Bar
6. Spectravap AVCL
7. Enertherm Insulation
8. Spectrabond LFPV Membrane Adhesive
9. Neuchâtel Armourplan SG/PSG Membrane
10. Neuchâtel Armourplan SM/P Uprand Membrane
11. Neuchâtel Armourplan Coated Chase Metal
12. PVC Sealant



NEUCHÂTEL ARMOURPLAN SINGLE PLY ROOFING IN ACTION CASE STUDIES

Case Study 1: VICTORIA LANE RESIDENCES, REMUERA

Victoria Lane Residences, a prestigious development situated on New Zealand's premier avenue, stands as a testament to architectural excellence and modern luxury. Crafted by the renowned Leuschke Group and constructed by CMP, this collection of upmarket residences epitomizes contemporary sophistication.

At the heart of this architectural marvel lies meticulous planning and attention to detail, including the crucial choice of waterproofing solutions. Neuchâtel, working in collaboration with Leuschke Group, played a pivotal role in selecting the most suitable products for the project's unique requirements.

Architect	Leuschke Group
Contractor	Ockham Residential 2024
Date	2024
Product	Neuchâtel Armourplan Single Ply Roofing
	Neuchâtel Permatec
System	Neuchâtel Armourplan Single Ply Warm Ballasted Roof System
	Neuchâtel Permatec Podium Deck System



Case Study 1: VICTORIA LANE RESIDENCES, REMUERA

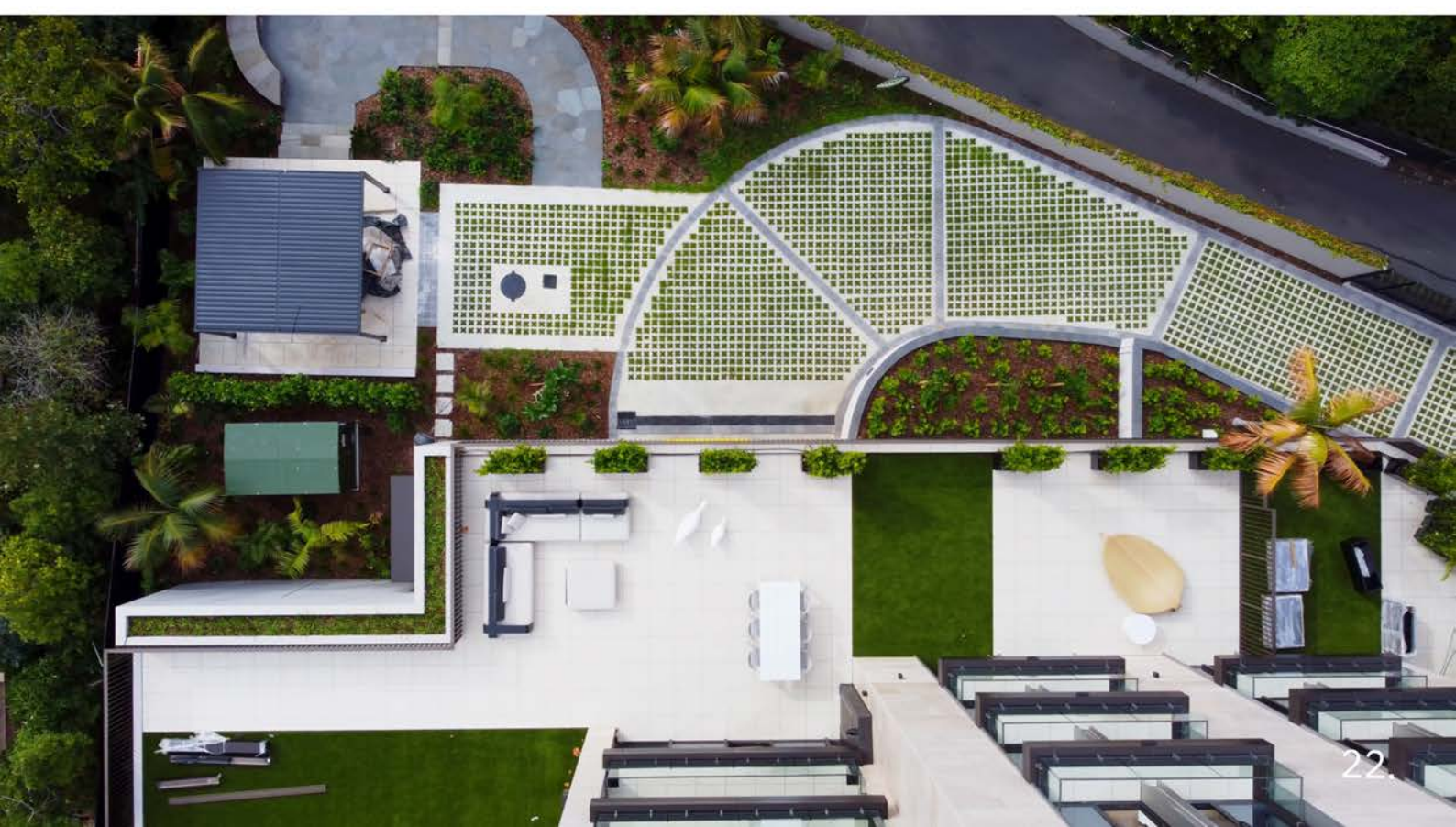
SOLUTION

The Neuchâtel Armourplan Warm Roof System was the natural choice for the roofing needs of Victoria Lane. Designed for durability and efficiency, this lightweight roofing system provided a seamless solution for the challenging site conditions, ensuring a secure and weather-resistant structure. With its flame-free, weldable nature, it offered not just reliability but also ease of installation, essential for projects with limited access like Victoria Lane.

For the podium deck and balconies, the Neuchâtel Permateg Podium Deck System emerged as the ideal safeguarding solution.

Renowned for its versatility and ease of installation, Permateg proved invaluable in accommodating the complexities of staged construction projects. Its liquid properties allowed for seamless joining and rejoining, facilitating uninterrupted progress even amidst the intricate design elements of Victoria Lane.

The outcome speaks volumes – a luxurious apartment complex that stands as a testament to craftsmanship and quality. Neuchâtel is proud to have contributed to this landmark project, where durability meets elegance, setting a new standard for contemporary construction.





Case Study 2: THE GREY APARTMENTS, GREY LYNN

OVERVIEW

Sitting at the top of the Great North Road ridge, The Grey is a boutique apartment building, which seamlessly blends edgy architectural elements with refined interiors, creating a captivating living space that resonates with the essence of Grey Lynn.

During the design phase, Architect Paul Brown and Associates enlisted the expertise of Neuchâtel to ensure the selection of optimal products and systems for the project. Neuchâtel Permatec was specified for the balconies and the Neuchâtel Armourplan Single Ply Cold Roof System for the roof.

Architect	Paul Brown & Associates
Contractor	CMP
Date	2024
Product	Neuchâtel Armourplan Single Ply Roofing Neuchâtel Permatec
System	Neuchâtel Armourplan Single Ply Cold Roof System Neuchâtel Permatec Podium Deck System



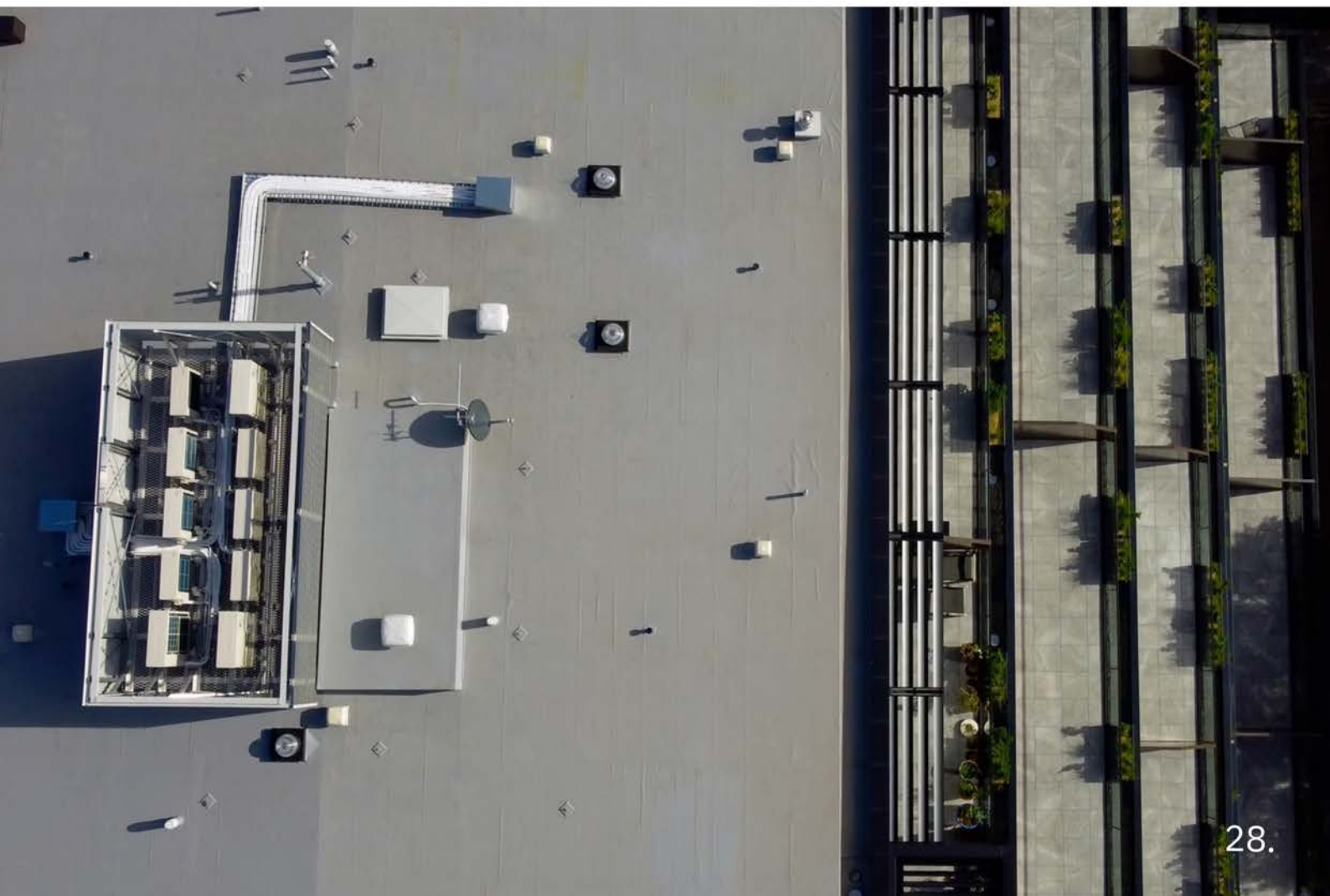
Case Study 2: THE GREY APARTMENTS, GREY LYNN

SOLUTION

The Armourplan Single Ply waterproof membrane was directly applied onto the structural decking. This method of waterproofing necessitates proper ventilation between the deck and the insulation layer to avert the upward movement of moisture vapour.

Permatec, renowned for its versatility and ease of installation, proved to be an excellent choice for balconies over habitable spaces. With its monolithic nature, Permatec can be seamlessly joined and rejoined, accommodating the complexities of staged construction projects effortlessly, and ensuring uninterrupted progress.

As The Grey stands proudly on its corner site, overlooking the streets of Grey Lynn, it serves as more than just a residential haven — it embodies the spirit of urban renewal and architectural excellence that defines this thriving community.





NEUCHÂTEL PERMATEC IN ACTION

INTERNATIONAL CASE STUDY

Case Study 3: EUROPEAN SPACE AGENCY CONFERENCE CENTRE

PROJECT DESCRIPTION

This roofing project was for the European Space Agency's international conference centre in Oxfordshire. Designed to provide a hub for space-based collaboration and innovation, the 1100m² space included a 300-seater conference hall, breakout meeting spaces, café and showcase areas.

Contractor	BriggsAmasco
Date	2024
Size	1,100m ²
Product	Neuchâtel Armourplan Single Ply Roofing



Case Study 3: EUROPEAN SPACE AGENCY CONFERENCE CENTRE

CHALLENGES

Thermal performance, fire performance, acoustic performance and compressive strength performance were priorities for this project. Neuchâtel's international product partner, IKO, worked with the client and contractor, Roofline, to provide performance calculations that showed how these critical considerations would be addressed. To achieve target U-values, an IKO enertherm PIR system was chosen – this also delivered on stringent compressive strength requirements, at 175Kpa per m². The IKO enertherm insulation solution was also part of a design strategy to reduce operational energy consumption, enabling the client to meet key sustainability targets.

INNOVATIVE APPROACH

From the outset, the contractor received a high level of technical input and expertise from IKO. Taking responsibility for the full system build-up, IKO delivered a robust single ply roofing solution from thermal performance right through to the waterproofing layer.

The project was regularly audited by IKO technical engineers, with a detailed report submitted to the client upon each inspection. Despite a number of adjustments that needed to be made to meet the bespoke requirements, a high-quality installation was delivered that exceeded all expectations. Featuring a low energy design, the finished building achieved BREEAM Excellent and B energy rating.



THE NEUCHÂTEL SERVICE

From pre-project design advice through to completion, guarantees and aftercare, Neuchâtel's experienced and friendly team will guide you through each stage of any project with an all-round support service.



Consultation

We start by listening to you, your requirements and your brief for the project



Design

Bespoke to your project requirements and the results of the survey



Solution

The result of stages 1-3 culminating in the right IKO specification for your project



Installation

Reassurance that your project will be installed by vetted, Approved IKO Contractors



Inspection

Visits to site before and during the project to achieve a quality, reliable installation



Guarantee

A long-term commitment from you deserves an equally long-term commitment from us



After Care

The final step, making sure your investment delivers years of faultless service.



For further information, contact Neuchâtel's Technical Services team on info@neuchatel.co.nz or **+64 21 840 660**.

PROTECTING WHAT MATTERS: SUSTAINABLE INNOVATION

As a responsible supplier of imported waterproofing products, Neuchâtel places great trust in our UK manufacturing partner, IKO. One of the primary reasons Neuchâtel chose to partner with IKO is their focus on sustainability.

IKO's aim is to limit the environmental impact of their operations and lifecycle of their products, from maximising energy efficiency and minimising waste to locally sourcing raw materials and reducing carbon emissions from transportation. All IKO manufacturing sites in the UK now also run on renewable energy.

We continue to make significant strides forward

Neuchâtel has committed to a programme of continuous improvements that apply to our ways of working and initiatives to reduce, reuse and recycle materials. This includes investing in more sustainable packaging and recycling on-site asphalt. Our product partner, IKO, also recycles hot charge waste at their Grangemill plant, which enabled them to achieve 100% zero waste-to-landfill in 2021/2022.

Leading the way in sustainable waterproofing solutions

IKO's R&D and product development teams continue to evolve and grow our portfolio of responsibly sourced products. Within the hot melt sector alone, IKO has been responsible for pioneering the market in terms of environmental responsibility, starting with the first UK-manufactured hot melt waterproofing system in 2002. This was followed by other leading innovations, such as zero waste packaging, anti-root and specially-formulated compounds, allowing for lower application temperatures on-site.

Neuchâtel proudly brings these environmentally responsible, innovative products to New Zealand, supporting the local market with sustainable waterproofing solutions that lead the way in performance and ecological impact.





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