EKODECK

Ekodeck® Shiplap Cladding System

Product Manual







CodeMark Australia
Certificate CM40387
CMI CERTIFICATION

No oiling, staining or sealing

Tested & built to last longer

25-year warranty

ekodeck.com.au

V3.26

Ekodeck® Cladding / Shiplap

CONTENTS

Profiles & Colours	**2**
Product Information	**3-4**
Warnings	3
Natural Variances & Colour	4
Thermal Expansion & Contraction	4
Technical Guide	**5-57**
1 Introduction	5
2 Compliance and National Construction Code (NCC) 2022	5
2.1 Structural Performance, H1P1 & B1P1	6
2.2 Weatherproofing Performance, H2P2 & F3P1	7
2.3 Thermal Performance, (J4D6, H6D2(1)(b)(i), 13.2.5)	8
3 System Components	8
4 Materials	9
5 Installation	9
5.1 General Installation	10
5.2 Horizontal Installation	10
5.3 Vertical Installation	13
5.4 Butt joining and use of expansion joins	15
5.5 Ceiling/Soffit Linings	16
6 Typical Horizontal Construction Details	17
7 Typical Vertical Construction Details	40
Technical Specifications	**59**
Care & Maintenance	**60**
Warranty	**61-64**

Ekodeck® Cladding / Shiplap

PROFILES & COLOURS

Colours



Carbon



Hazelwood



Lighthouse

Weatherboards

COLOUR	SIZE	ITEM NO	PROFILE
Carbon	164×13.5×5400mm	0617437	
Hazelwood	164×13.5×5400mm	0617436	
Lighthouse	164×13.5×5400mm	0680667	

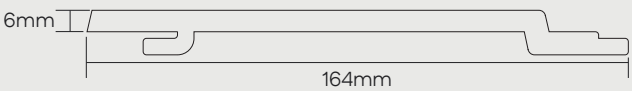
J Channels

COLOUR	SIZE	ITEM NO	PROFILE
Carbon	60×27×2700mm	0617438	
Hazelwood	60×27×2700mm	0617435	
Lighthouse	60×27×2700mm	0680670	

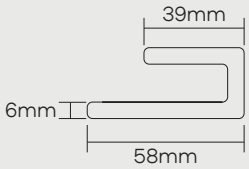
Clips

PRODUCT	PACK SIZE	ITEM NO	PROFILE
Cladding Clips	250 Clips	0643235	

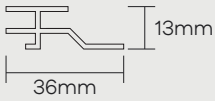
Shiplap Cladding

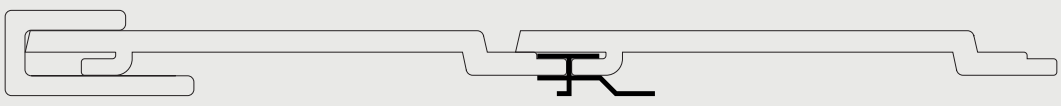


J Channel



Clip





Ekodeck® Cladding / Shiplap

PRODUCT INFORMATION

Do not end-to-end butt join Ekodeck® Shiplap Cladding.
Being a composite product, Ekodeck® Shiplap Cladding behaves and has different characteristics to traditional cladding.
To achieve a safe and long lasting Ekodeck® Shiplap Cladding installation, it is imperative to read the following guide in full.

Warnings

1. Do not end-to-end butt join Ekodeck® Shiplap Cladding.
2. Do not fasten using multiple clouts in the secondary holes in the Cladding Clips, except where outlined in this manual.
3. Ekodeck® Shiplap Cladding is a pre-finished product, use care when storing, handling and installing to avoid damage.
4. It is the sole responsibility of the homeowner, contractor or the installer to determine the specific requirements, effectiveness, suitability and safety with regard to any application or use of Ekodeck® products.
5. Ekodeck® Shiplap Cladding is not designed to be a freestanding product. It must be installed safely and correctly fixed to studs or battens.
6. The framing must comply with all the relevant regulations and aspects of the Building Code of Australia.
7. Ekodeck® Shiplap Cladding should not:
   A. Be used in a substructure application
   B. Be applied directly to a solid surface such as concrete
8. Any single piece of Ekodeck® Shiplap Cladding must be installed over at least 2 spans (i.e. 3 studs) to keep within the structural load bearing limits of its design.
9. Ekodeck® Shiplap Cladding must have sufficient gaps provided at ends to allow for proper thermal movement and ventilation.

Important information - Fire compliance

Ekodeck® Shiplap Cladding has been tested in accordance with AS1530.3:1999 with the regulatory indices below:

Items	Regulatory Indices
Ignitability index (0-20)	0
Spread of flame index (0-10)	0
Heat evolved index (0-10)	0
Smoke developed index (0-10)	7

Full test report available at ekodeck.com.au

Static electricity

All co-extruded composite products, including Ekodeck® Shiplap Cladding can, under certain conditions, exhibit build-up of static electricity.

Low humidity and dry environmental conditions are the biggest contributing factors of static electricity build-up. Other factors include, but are not limited to, frame materials or earthing.

This phenomenon may be reduced by using an anti-static spray (such as ACL Staticide). These products are water based and may require additional applications after rain or other weather conditions. Insulating touch points such as balustrades or door handles may also assist.

Generally, the static build-up tends to reduce over time as the boards wear in. Ekodeck® does not warrant against static build-up in Shiplap Cladding boards.

Ekodeck® Cladding / Shiplap

PRODUCT INFORMATION

Safety

Always use proper protective clothing and safety equipment.

Ekodeck® Shiplap Cladding boards are heavier than traditional cladding materials. Always exercise precaution and care when lifting.

Storage & handling

Ekodeck® Shiplap Cladding boards must be:

- Supported at least every 600mm on a level plane.
- Laid flat especially during transportation and never at an angle.
- Never be dropped or 'dumped' when unloading.
- Stored on a flat, dry surface.
- Covered until it is time to use them for installation.



Carry this side up

Natural variances & colour

Ekodeck® Shiplap Cladding is made by combining reclaimed timber with a mix of new and recycled plastics. It is designed to have a variation of colour and tone from one board/batch to another.



It is necessary to lay out your boards to ensure you have an even mix of both light and dark tones across the project prior to cutting or installing to avoid large blocks of single tones. Boards cannot be exchanged or returned after they have been cut. If you do not accept the colour/finish of the board, do not cut or install it.



Ekodeck® Shiplap Cladding boards are subject to normal manufacturing variations and tolerances. Reasonable variances in board dimensions are not considered a product fault and due care should be taken when installing to allow for these.

Surface finish & fibres

During manufacturing, Ekodeck® boards are sanded to give them a natural, textured look and feel. Residual fibres/hairs may be present on the boards because of this. Excessive scrubbing or pressure washing may exacerbate these fibres. These will wear off over time with product use and are not considered a product fault.

Pressure washing

Do not use a pressure washer on Ekodeck® Shiplap Cladding. The use of a high-pressure washer could cause irreparable damage to your cladding.

Cutting

For best results, use hardwood blades. When using a drop saw we recommend a 60-80 tooth blade for cutting.

Thermal expansion & contraction

Ekodeck® expands and contracts in length with changes in temperature. This is normal behaviour of any wood plastic composite and is not a product fault.

It is most important to take this into consideration during installation of your Ekodeck® Shiplap Cladding.

Ekodeck® Cladding / Shiplap

TECHNICAL GUIDE

1 Introduction

Ekodeck® Shiplap Cladding System is suitable for use on external walls of buildings to satisfy weatherproofing, wind strength and thermal performance requirements.

Ekodeck® Cladding System may be installed either horizontally, (clip-fixed to studs) or vertically (clip-fixed to top-hat battens).

This manual is provided for use by designers and builders. It describes system performance, installation and typical construction detailing requirements for use of the Ekodeck® Shiplap Cladding System.

Product selection, and incorporation into the building design, must be made by a person who is conversant with the application and technical aspects of the product, and has ready access to the relevant technical information related to the product use.

It is recommended that installation is carried out by a competent carpenter or tradesman under the direction of a Builder, who are conversant with the method of product installation and have access to all relevant technical information on product installation.

2 Compliance and National Construction Code (NCC) 2022

Ekodeck®'s Cladding System has been tested, appraised, and certified to the following performance requirements and deemed-to-satisfy provisions of NCC 2022, Volumes One & Two, Building Code of Australia, for Building Classes 1 to 10.

- Structure: (H1P1, B1P1 Structural stability and resistance to actions) Tested and appraised for serviceability and strength under wind actions up to and including AS 4055 Wind Class N4.
- Weatherproofing: (H2P2, F3P1 Weatherproofing) Tested and appraised for resistance to the penetration of water.
- Energy Efficiency: (Vol. One J4D6, Vol. Two H6D2(1)(b)(i), Housing Provisions 13.2.5 External Walls). Ekodeck® Shiplap Cladding System achieves high Total R-values which may be used to satisfy J4D6 & H6D2(1)(b)(i) external wall insulation requirements, or as input to house energy rating software to achieve an energy rating.

Project designers should also consider factors such as:

- Identify relevant performance requirements and project specific needs
- Wind design actions and local wind pressures
- Expansion joint locations; and
- Other NCC, local & state government requirements.

The performance-based National Construction Code (NCC) provides different compliance pathways to enable building construction to achieve required performance levels. NCC Compliance may be demonstrated as either a Deemed-to-Satisfy Solution, or as a Performance Solution.

Few external wall cladding systems are listed as a Deemed-to-Satisfy solution.

(E.g. For weatherproofing performance, systems are limited to those referenced in ABCB Housing Provisions Part 7.5 (as referenced by NCC 2022 Volume Two, Section H2D6(4) & H1D7(4)(b)), and NCC 2022 Volume One Section F3D5.) External wall cladding systems not explicitly described as part of these deemed-to satisfy provisions can only demonstrate compliance as a Performance Solution.

Depending on project specific requirements, external walls of buildings may be required to comply with performance requirements for structure, fire, weatherproofing, dampness, bushfire, condensation and energy efficiency.

Details of compliance of the Ekodeck® Cladding System for structure (wind strength), weatherproofing and energy efficiency are outlined below.

2.1 Structural Performance, H1P1 & B1P1

Ekodeck® Cladding System has been designed and tested for use in AS 4055 Wind Classifications N1 to N4 (excluding AS 4055 Wind Classifications N5, N6, C1, C2, C3 and C4). This includes AS/NZS 1170.2 Design Ultimate Limit State Wind Pressures between ±3.83kPa and Serviceability Limit State Wind Pressures between +0.82 to -1.23kPa.

Ekodeck® Shiplap Support Spacing (mm)	AS 4055 Wind Classification	AS/NZS 1170.2 Max. Design Wind Pressure (kPa)	
		Serviceability (SLS)	Strength (ULS)
450	N1, N2, N3 & N4	+0.82 / -1.23	3.83
600	N1, N2 & N3		2.87

The design wind loads for any particular building are site specific and must be determined by the design professional responsible for the project.

General requirements / limitations include recognition that Ekodeck® Shiplap Cladding System:

- is not intended to act as wall bracing. Resistance to the design racking loads must be accommodated by other means prior to installation of the wall wrap.
- is not load-bearing and control joints are required at regular intervals to allow for building movement.
- shall be fixed to framing at a maximum 600mm spacing.

Note: To achieve Wind Classification in accordance with AS 4055, Wind Loads for Housing, a house shall;

- have a maximum distance of 6.0m from ground level to the underside of eaves; and,
- have a maximum distance from ground level to the highest point of the roof (not including chimneys) of 8.5m; and,
- have a maximum width (including roofed verandas, but excluding eaves) of 16.0m, and the maximum length shall not exceed five times the width; and,
- not have a roof pitch greater than 35 degrees.

Houses that do not meet these requirements shall be designed to resist wind pressures determined in accordance with AS/NZS 1170.2.

2.2 Weatherproofing Performance, H2P2 & F3P1

Ekodeck® Cladding System complies with the NCC performance requirements for weatherproofing confirmed based on testing in accordance with the NCC weatherproofing verification methods H2V1 & F3V1.

Weatherproofing performance has been verified for external walls with;

- Serviceability Limit State (SLS) design wind pressures up to AS 4055, Wind Classification N4 (equivalent to AS/NZS 1170.2 design SLS pressures of +0.82 kPa to -1.23 kPa); and
- Windows that comply with AS 2047-Windows and external glazed doors in buildings; and
- Has a Risk Score of 20 or less determined in accordance with NCC 2022, Volume Two, Table H2V1a & Volume One Table F3V1a-Risk factors and scores, as follows:

Risk Factor	Category	Risk severity	Score
Wind region	Region A0-5 (AS/NZS 1170.2)	Low to medium	0
	Region B1-2 (AS/NZS 1170.2)		
	Region C (AS/NZS 1170.2)	High	1
	Region D (AS/NZS 1170.2)	Very high	2
Number of storeys	One storey	Low	0
	Two storeys in part	Medium	1
	Two storey	High	2
	More than two storeys	Very high	4
Roof/wall junctions	Roof-to-wall junctions fully protected	Low	0
	Roof-to-wall junctions partially exposed	Medium	1
	Roof-to-wall junctions fully exposed	High	3
	Roof elements finishing within the boundaries formed by the external walls	Very high	5
Eaves width	Greater than 600mm for single storey	Low	0
	451-600mm for single storey; or	Medium	1
	Greater than 600mm for two storey		
	101-450mm for single storey; or	High	2
	451-600mm for two stoey; or		
	Greater than 600mm for above two storey		
	0-100mm for single storey; or	Very high	5
	0-450mm for two storey; or		
	Less than 600mm for above two storey		
Envelope complexity	Simple shape with single cladding type	Low	0
	Complex shape with no more than two cladding types	Medium	1
	Complex shape with more than two cladding types	High	3
	As for high risk but with fully exposed roof-to-wall junctions	Very high	6
Decks, porches and balconies	None	Low	0
	Timber slat deck or porch at ground level		
	Fully covered in plan view by roof	Medium	2
	Timber slat deck attached at first or second floor level		
	Balcony exposed in plan view at first floor level	High	4
	Balcony cantilevered at first floor level		
	Balcony exposed in plan view at second floor level or above	Very high	6
	Balcony cantilevered at second floor level or above		

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2.3 Thermal Performance, (J4D6, H6D2(1)(b)(i), 13.2.5)

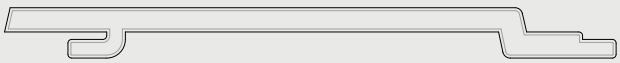
Ekodeck® Cladding Systems incorporating vertical or horizontal panels, breathable wall wrap and 10mm plasterboard lining achieve the following Total R-values in accordance with AS/NZS 4859.1:2018.

These Total R-values may either; satisfy the minimum requirements of NCC 2022, Volume One J4D6, Volume Two H6D2(1)(b)(i) & Housing Provisions 13.2.5 external wall insulation requirements; or, may be used as inputs to house energy rating software to achieve an energy rating.

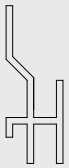
Ekodeck® Cladding System (with 90mm R2.5 batts)		**Total R-value ($m^2.K/W$)**	
		Winter (Heat flow outwards)	**Summer (Heat flow inwards)**
Horizontal (clip-fixed to stud)	**Timber Frame**	2.45	2.32
	Steel Frame (with R0.2 thermal break)	1.97	1.89
Vertical (clip-fixed to top-hat batten)	**Timber Frame**	2.65	2.49
	Steel Frame	2.00	1.88

3 System Components

Ekodeck® Shiplap Cladding



Ekodeck® Shiplap Cladding Clip



Ekodeck® Shiplap Cladding - to - Cladding Clip Assembly



Ekodeck® Shiplap Cladding J-Channel



4 Materials

The following table present the materials tested and approved for use.

Description of material	Details of specific material used
Wall wrap type	Light Wall Duty, Class 4 VCM (e.g. Ametalin VapourTech Wall)*
Wall wrap/flashing tape	Wall wrap compatible tape (e.g. Ametalin QuickTape 48mm)*
Type of sealant	Sikaflex - 111 with Sika 206 G+P Primer
Steel top-hat batten (vertical system only)	G550, 25mm x 0.55BMT Top Hat Batten*
Timber batten (vertical system only)	70 x 35mm, MGP10, H3 Castellated to provide min. 1000mm²/m opening, Chamfered top*
Screw to fasten cladding clip to timber stud	8g x 30mm exterior use*
Screw to fasten cladding clip to steel stud/top-hat	Buildex 10g x 16mm Smooth Top Teks*
Clout to fasten through second hole in cladding clip	30 x 2.0mm Stainless Steel Clout*

*or equivalent

No component substitutions permitted on any design unless approved equivalent. Installation of any non-standard or non-approved Ekodeck® Shiplap Cladding System components will void any product warranty or claims in relation to product performance.

5 Installation

In all cases the Ekodeck® Shiplap Cladding System should only be installed in accordance with this manual. The design, specification, supply and construction of steel or timber wall framing does not form part of the Ekodeck® Cladding System.

Ekodeck® Cladding System must be installed only by qualified and experienced carpenters or other tradesmen, who are conversant with the installation techniques set out in this Ekodeck® Cladding System Technical Guide.

Framing should be constructed in accordance with the relevant requirements of:

- AS 1684.2 Residential Timber Framed Construction - Non-cyclonic areas, or
- NASH Standard Residential and low-rise steel framing, or
- another appropriate standard.

5.1 General Installation

- All external surfaces of the frame shall be plumb and parallel.
- Do not end-to-end butt join lengths of Shiplap Cladding. Where walls are over 5.4m, use a suitable control join as per the Typical Construction Details. For more information see section **5.4 - Butt joining and use of expansion joins**.
- Breathable Wall Wrap - Fix over the studs, and cut around penetrations and openings (e.g. doors, windows) in accordance with AS 4200.2:2017.
- Install Flashing Tape to seal the breathable wall wrap at all joins, openings and around the perimeter of the wall frame. Flashing Tape must always be applied in accordance with the manufacturers' instructions including:
  - surfaces are clean and dry
  - pressure is applied to the tape so the adhesive is firm contact with the substrate.
- Flashing Tape is not a mechanical joining device, ensure that the materials being joined are mechanically secured.
- Additional framing shall be provided as required at joins and penetrations.
- All windows, doors, service penetrations & attachments must be fitted before commencing installation. All aspects of the design, supply and correct installation of penetrations, e.g. windows, doors, are outside the scope of the Ekodeck® Shiplap Cladding System.
- The placement of expansion joints is the responsibility of the designer to ensure they are sufficient to accommodate any project specific movement. Good building practice typically requires expansion joints at each floor level and at all joints between different building construction materials. Don't board over horizontal control joints for the structure.
- The designer and builder must ensure that the building including all drainage paths and flashings will prevent the ingress of rain water behind the panels and will drain to the outside of the building.
- All General Construction and flashing practices undertaken after installation of the Ekodeck® Cladding System must maintain water tightness.
- Ensure to pre-drill whenever fastening through the Ekodeck® Cladding or the J-Channel.
- As a guide, fasten J-Channels every 450-600mm, depending on your stud spacings.
- For applications where multiple J-Channels are installed end-to-end, it is necessary to provide expansion gaps between J-Channels. Use the below table for guidance:

		Ambient temperature during installation (°C)			
		10°C	20°C	30°C	40°C
Board length (m)	1m	2mm	1mm	0mm	0mm
	2m	2mm	1mm	0mm	0mm
	2.7m	2mm	1mm	0mm	0mm

e.g. If temperature during installation is 20°C, the recommended end gap for a 2.7m board is 1mm.

- Maximum centre-to-centre stud/batten/support spacing varies dependant on the application, see table below:

Installation Application	Maximum Centre-to-Centre Support Spacing
Horizontal	600mm
Vertical	450mm
Ceiling/Soffit	450mm

5.2 Horizontal Installation

- Maximum centre-to-centre spacing between studs is 600 mm.
- When using J-Channels horizontally at the base, drill 10mm holes into the J-Channel every 450mm. Holes must also be drilled at the LHS and RHS corners to provide adequate drainage.
- When making a vertical join, ensure that both J-Channels are fixed directly to a stud.
- When working around windows, doors or fixtures, ensure J-Channels are installed around the perimeter of the opening/penetration/service.
- Allow a gap between J-Channels and the perimeter of any opening for the application of sealant.
- Screw fix all Ekodeck® Cladding Clips to the studs. Screws must penetrate minimum 25mm into timber framing, or minimum 3-full-threads into steel framing.
- Horizontal Control Joints - Provide horizontal control joints at all locations as noted for the specific project.
- Ekodeck® Shiplap Cladding will expand and contract in their length. Vertical Control Joints, where the end of a board is inserted into a J-Channel, must have 5mm clearance at each end.
- At the centre-most stud, pre-drill the cladding board and secure a clout through the secondary hole in the clip (see Figs .1 & 2).

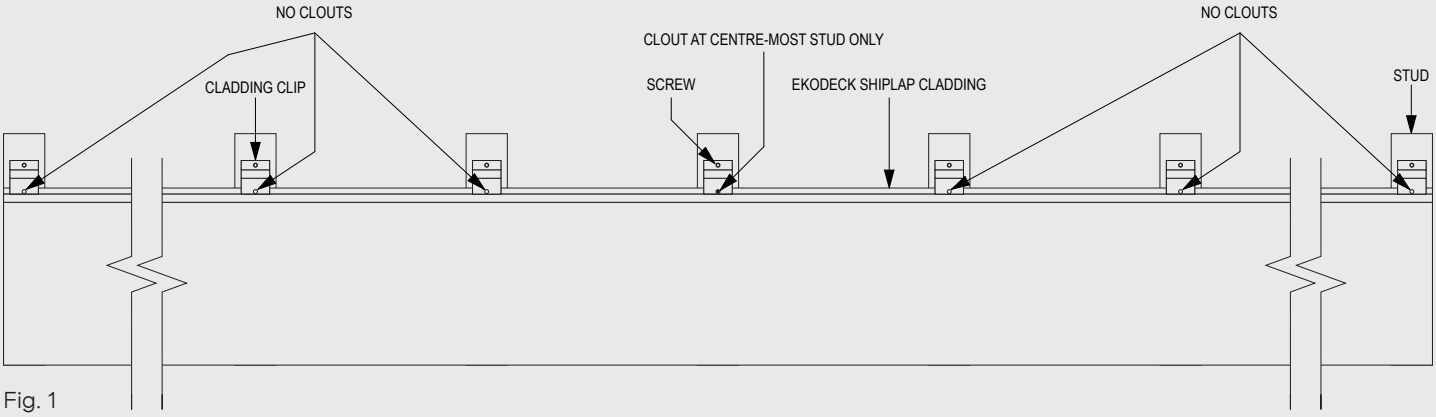


Fig. 1

This is an example only. For detailed drawings please refer to section 6, Typical Horizontal Construction Details.

5.2 Horizontal Installation - continued

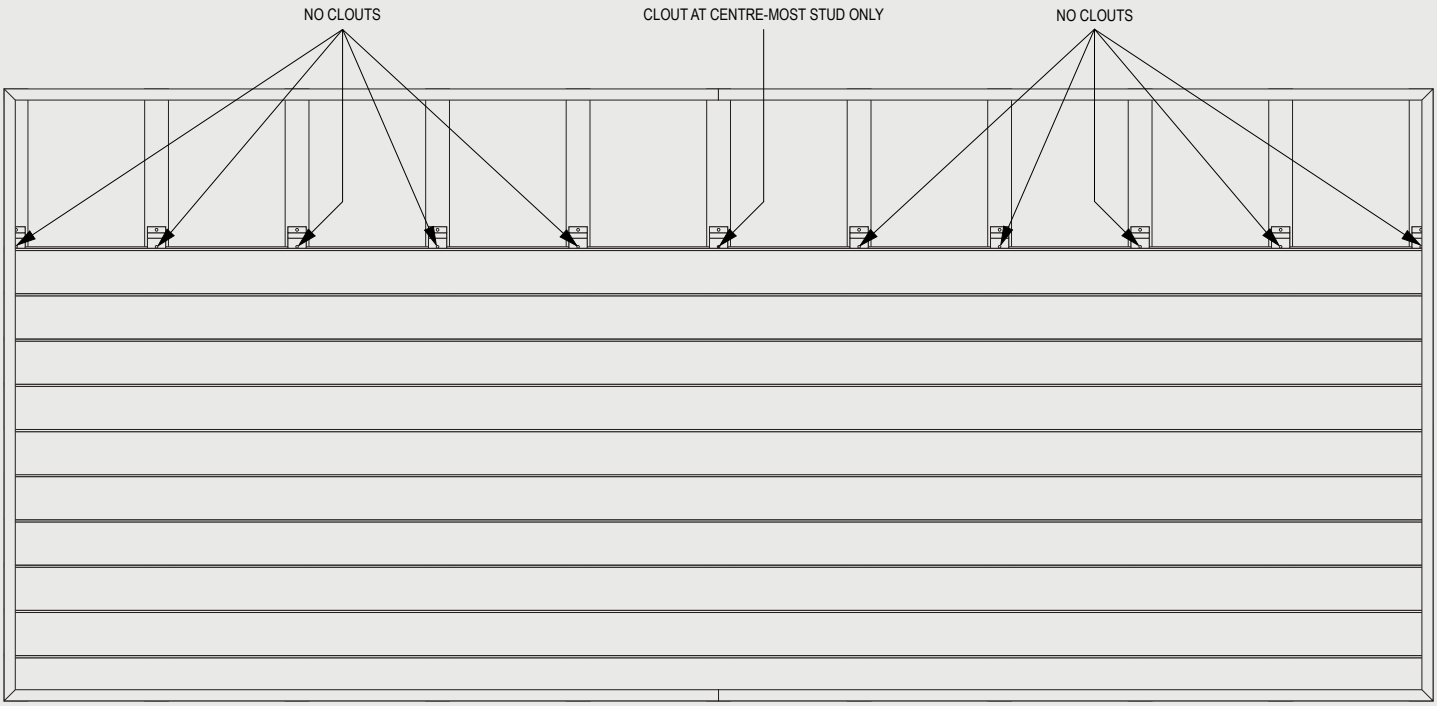


Fig. 2

Do not install multiple clouts across a single length of Ekodeck® Shiplap Cladding. Only install one clout per board at the centre-most stud.

5.3 Vertical Installation

- Horizontal steel top-hat battens must be fixed at maximum 450mm centre-to-centre spacing, shall be fixed with two 10g screws at each stud.
- Horizontal 70x35 MGP10, H3 castellated timber battens must be fixed at maximum 450mm centre-to-centre spacing with two 10gx65mm bugle batten screws at each stud.
- When using J-Channels horizontally at the base, drill 10mm holes into the J-Channel every 450mm. Holes must also be drilled at the LHS and RHS corners to provide adequate drainage.
- At the top 3 battens, predrill the cladding board and secure clouts through the secondary hole in the clips (see Figs. 3 & 4).
- When working around windows, doors or fixtures, ensure the J-Channels are installed around the perimeter of the opening/penetration/service.
- Allow a gap between Ekodeck® Cladding and the perimeter of any openings for application of sealant.
- Screw fix all Ekodeck® Cladding Clips to the steel top-hat batten. Screws must penetrate minimum 3-full-threads into steel framing.
- When making a horizontal or vertical join, ensure the both J-Channels are fixed directly to a batten.
- Ekodeck® Shiplap Cladding will expand and contract in their length. Horizontal Control Joints, where the end of a board is inserted into a J-Channel, must have 5mm clearance at each end.
- Note that as a minimum, horizontal control joints typically correspond to the storey height. In all cases horizontal control joints must be made at all construction joints and at the junctions of dissimilar substrates where the potential for differential movement exists.

5.3 Vertical Installation - continued

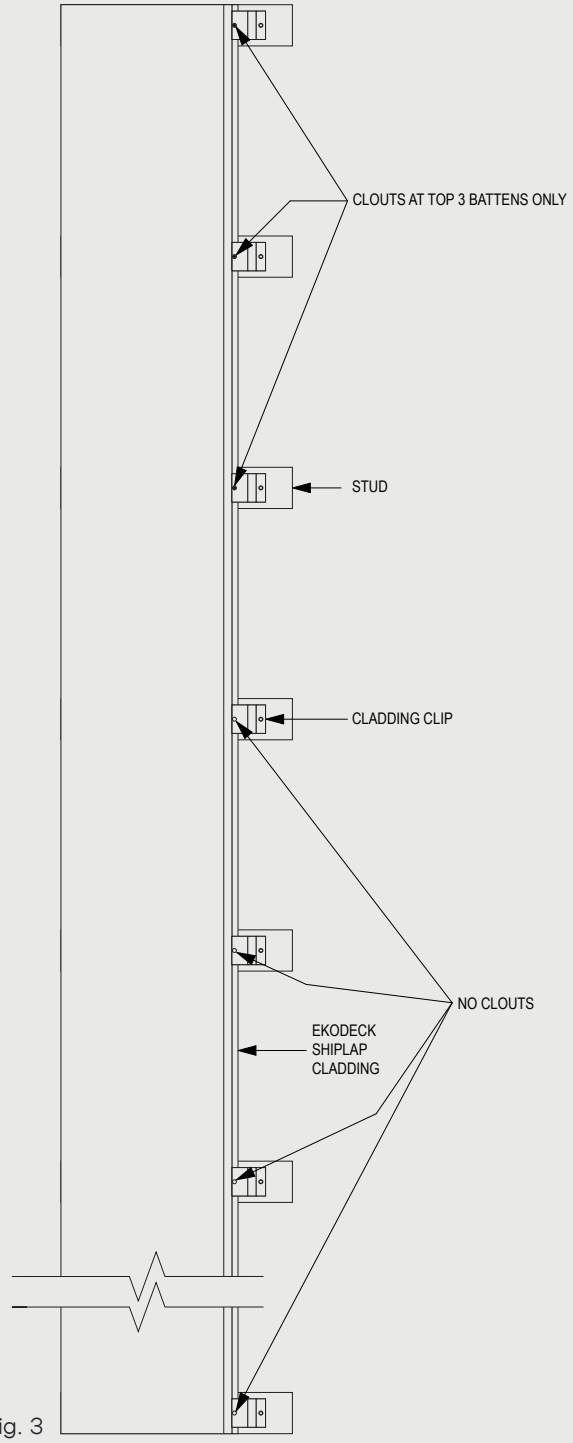


Fig. 3

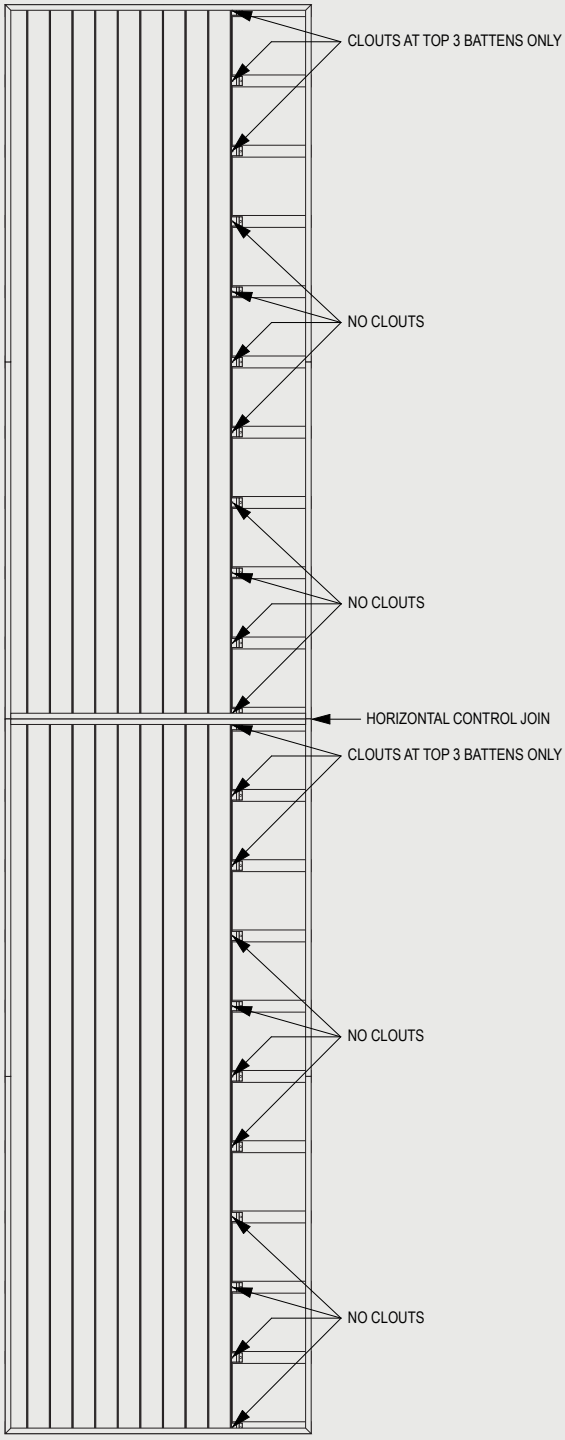


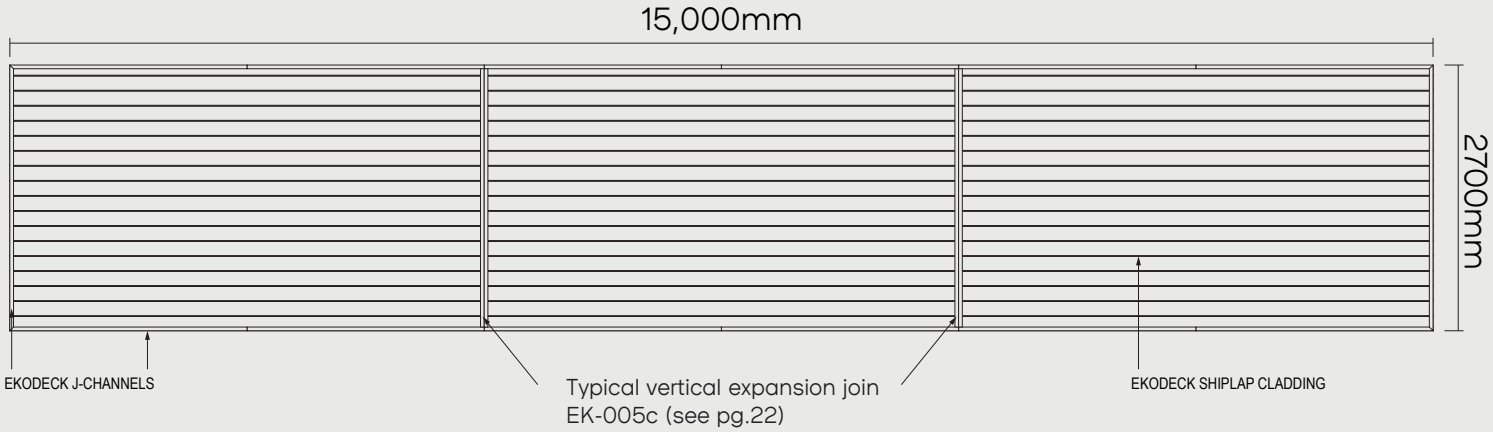
Fig. 4

Do not install clouts on every batten. Only install clouts at the top 3 battens of every Ekodeck® Shiplap Cladding board.

5.4 Butt joining and use of expansion joins

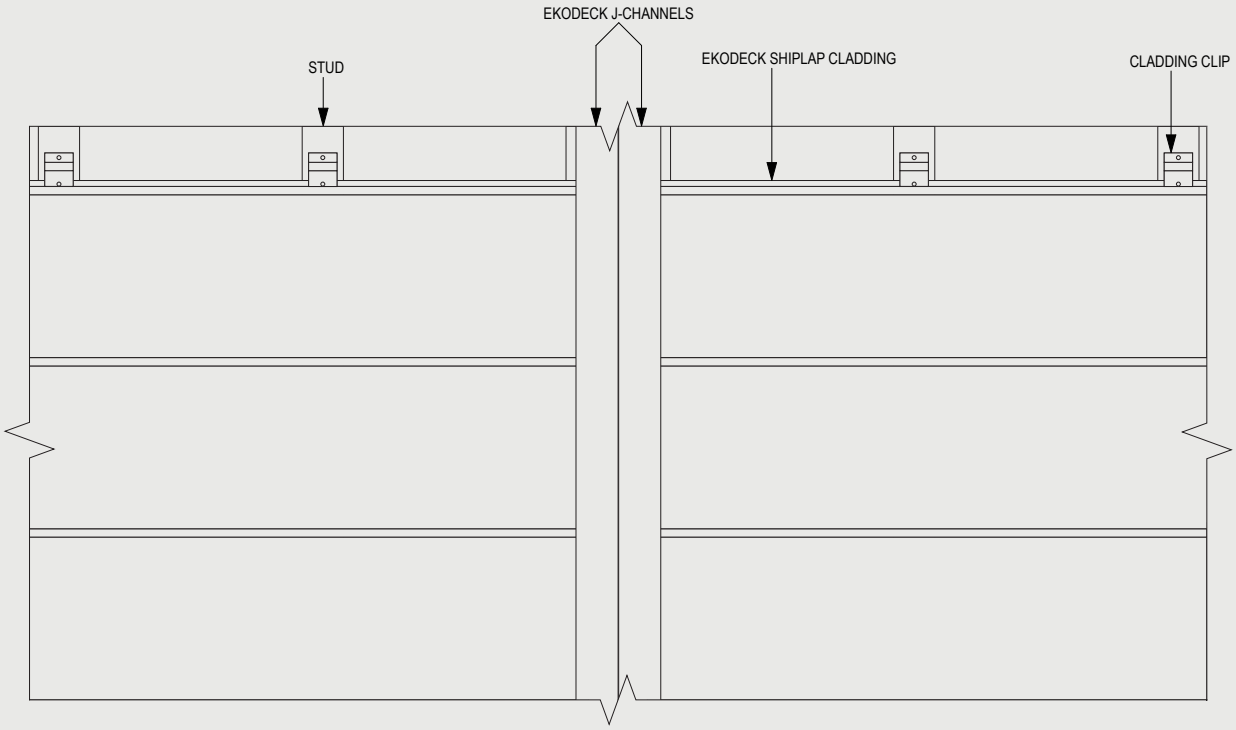
Do not end-to-end butt join lengths of Shiplap Cladding. When joining lengths of Ekodeck Shiplap Cladding, use a suitable expansion join as per the Typical Construction Details.

Suggested layout for 15m long x 2.7m high wall, horizontal installation:



5.4 Butt joins and use of expansion joins - Horizontal installation

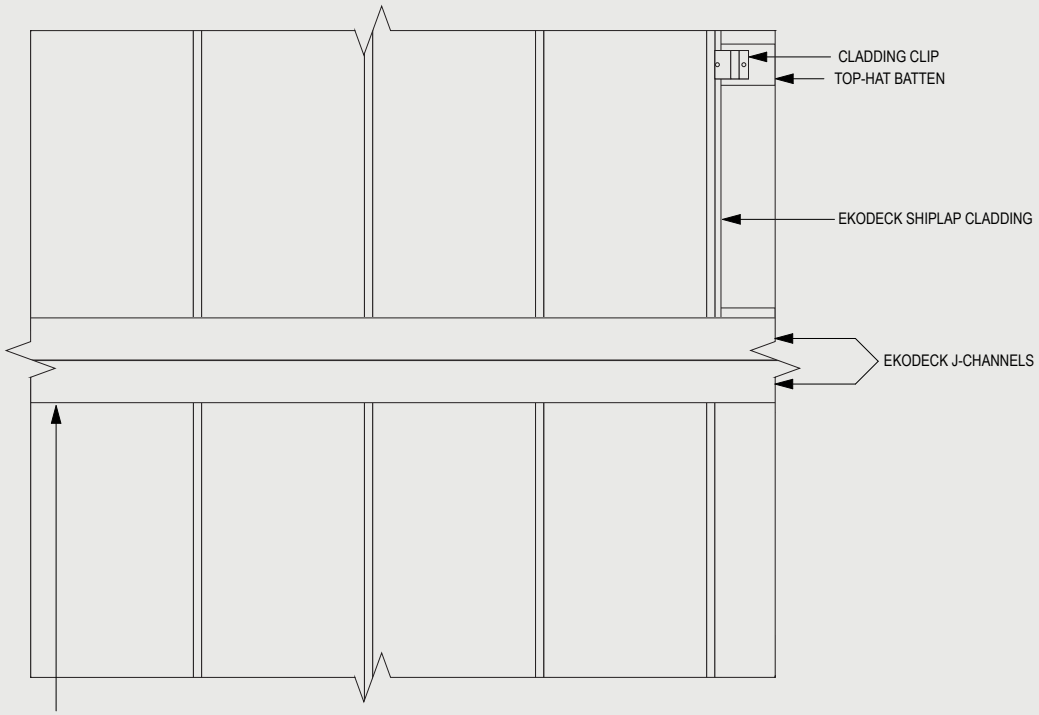
When installing Ekodeck Shiplap Cladding horizontally, it is necessary to use a vertical expansion join between sections. Example below:



Typical vertical expansion joint used in a horizontal installation. (EK-005c / pg.22)

5.4 Butt joins and use of expansion joins - Vertical installation

When installing Ekodeck Shiplap Cladding vertically, it is necessary to use a horizontal expansion join between sections. Example below:



Typical horizontal expansion joint used in a vertical installation. (EK-005a / pg.44)

5.5 Ceiling/Soffit Linings

Ekodeck® Shiplap Cladding can be installed in the horizontal plane as a ceiling or soffit lining.

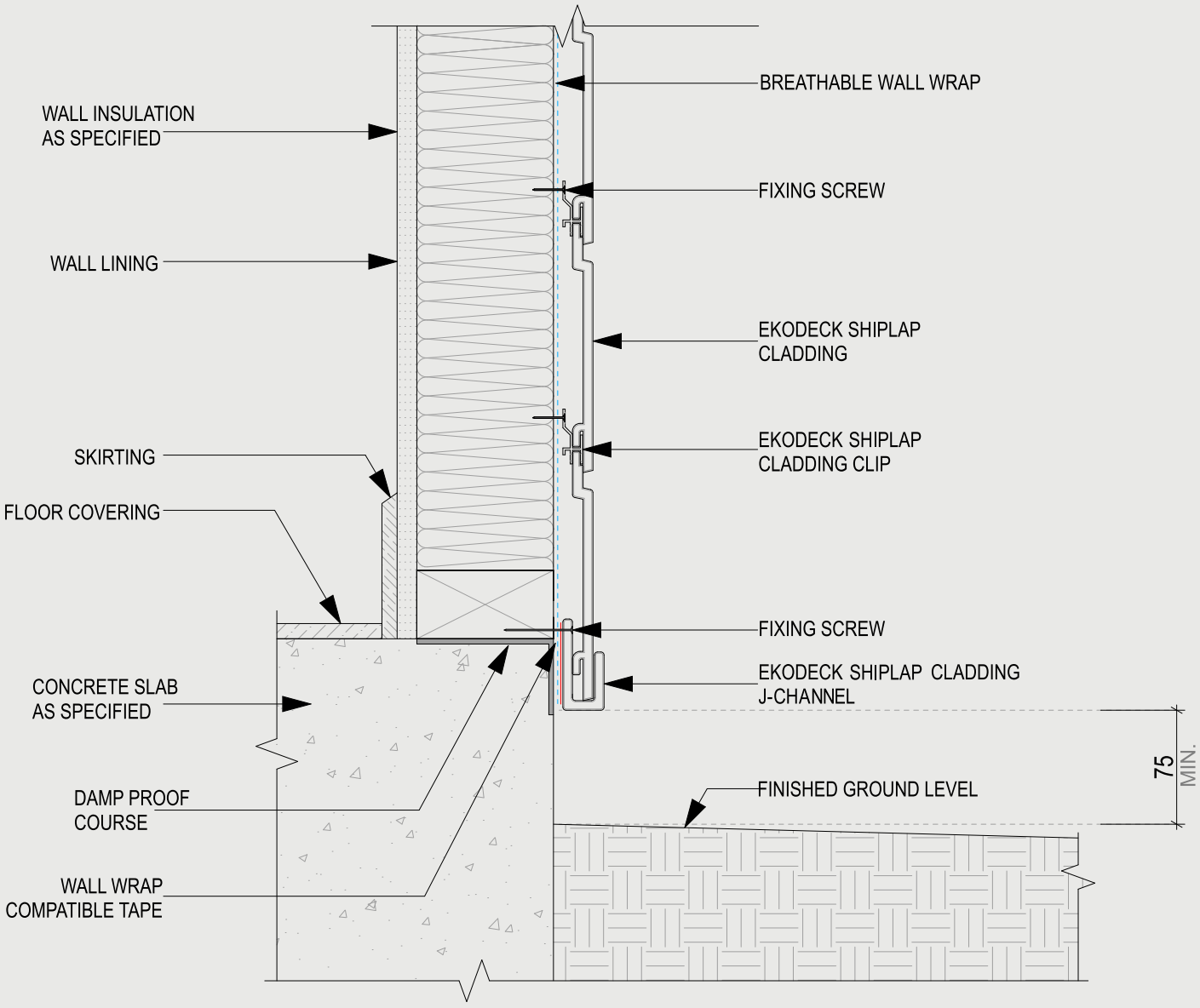
When installing as a ceiling lining, the principles for horizontal applications outlined on page 11-12 are to be followed, i.e. a singular clout is fixed at the centre stud of every Shiplap Cladding board.

The maximum support span is 450mm in a ceiling application.

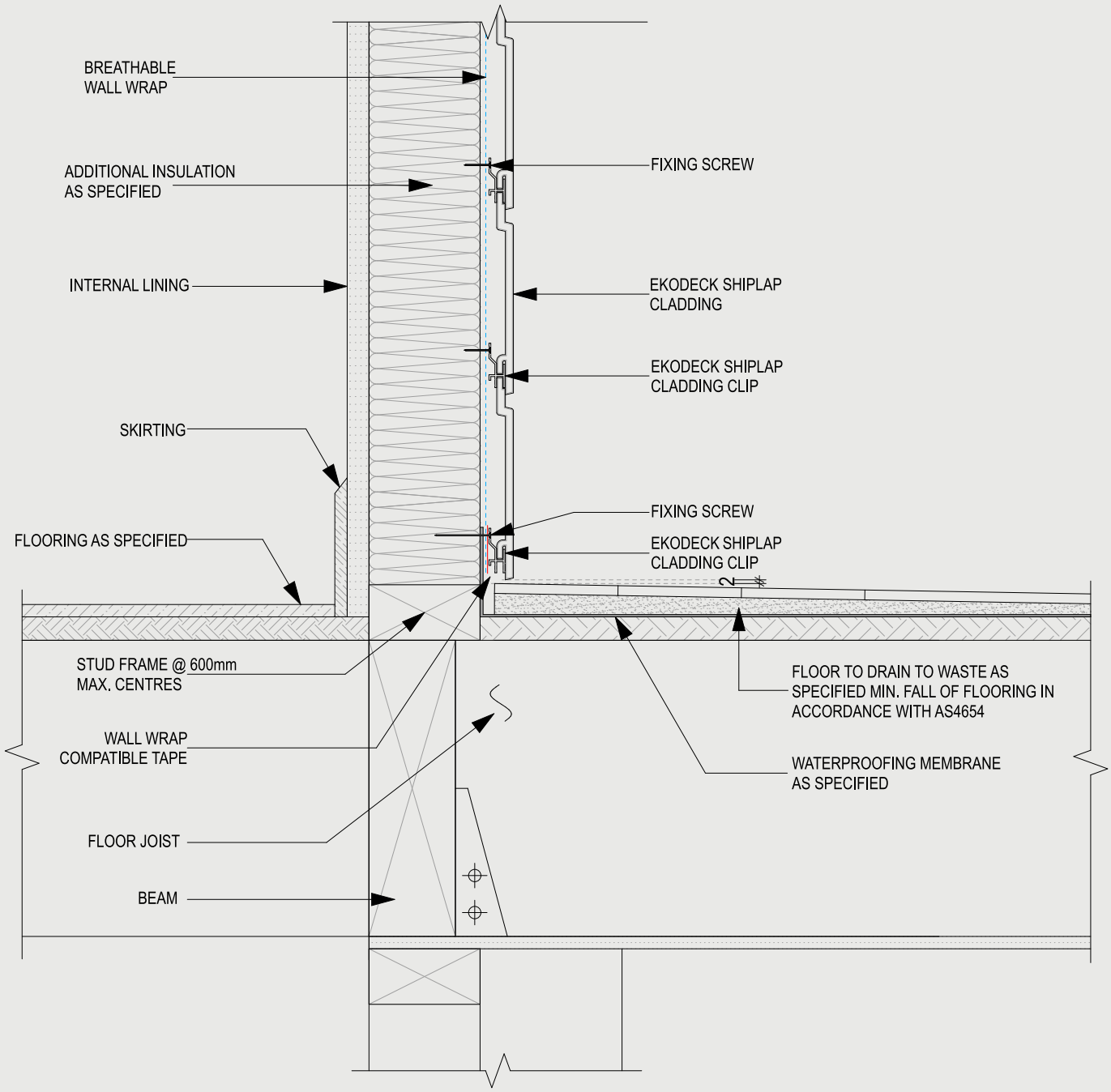
6 Typical Horizontal Construction Details

The Ekodeck® Cladding System must be installed in strict accordance with this Technical Guide and comply with all relevant building code, standards, and local government regulations.

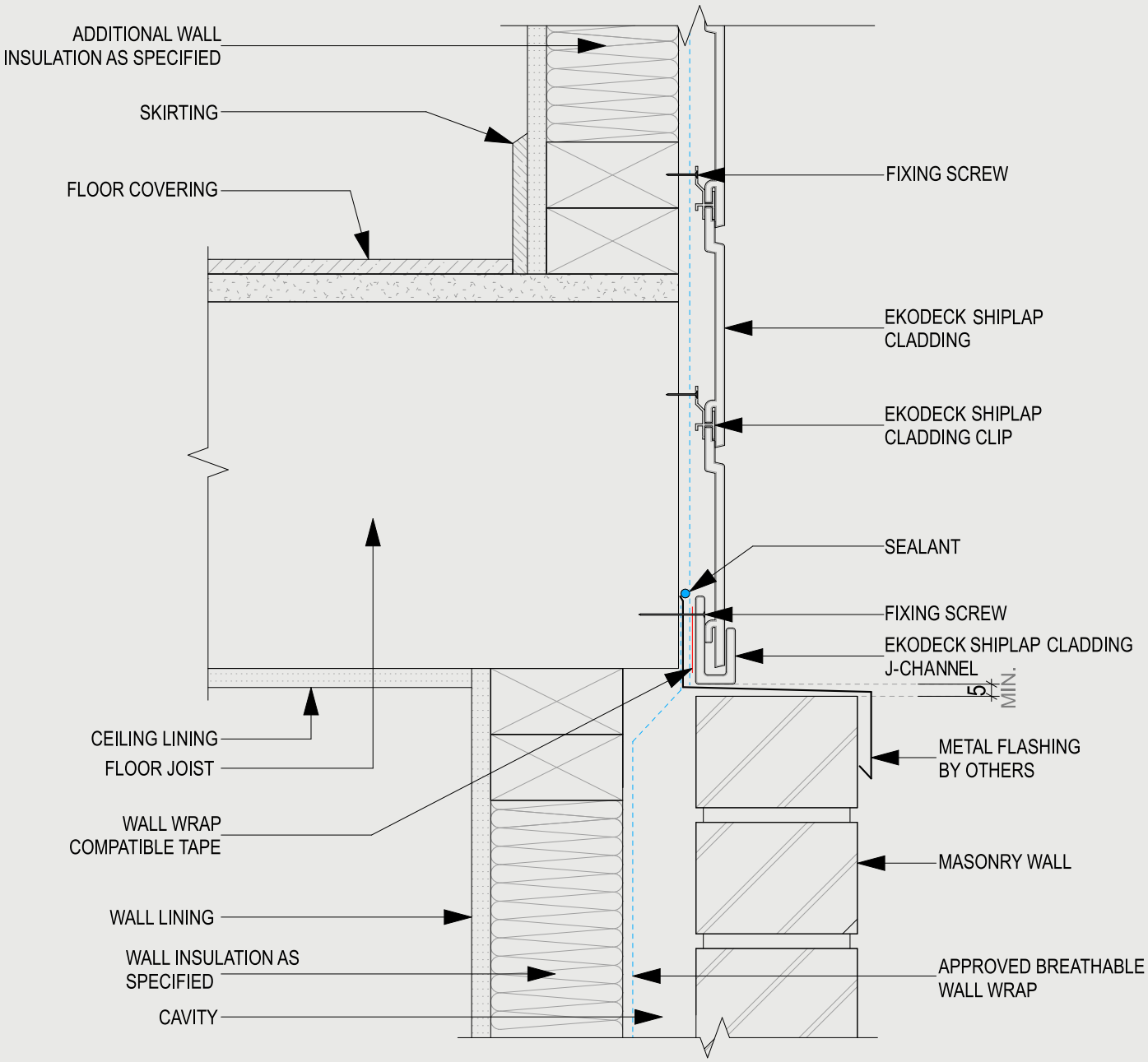
These typical construction details are provided as a guide for construction industry professionals. These typical construction details do not constitute a project specific specification and should only be used within the context of project specifications.



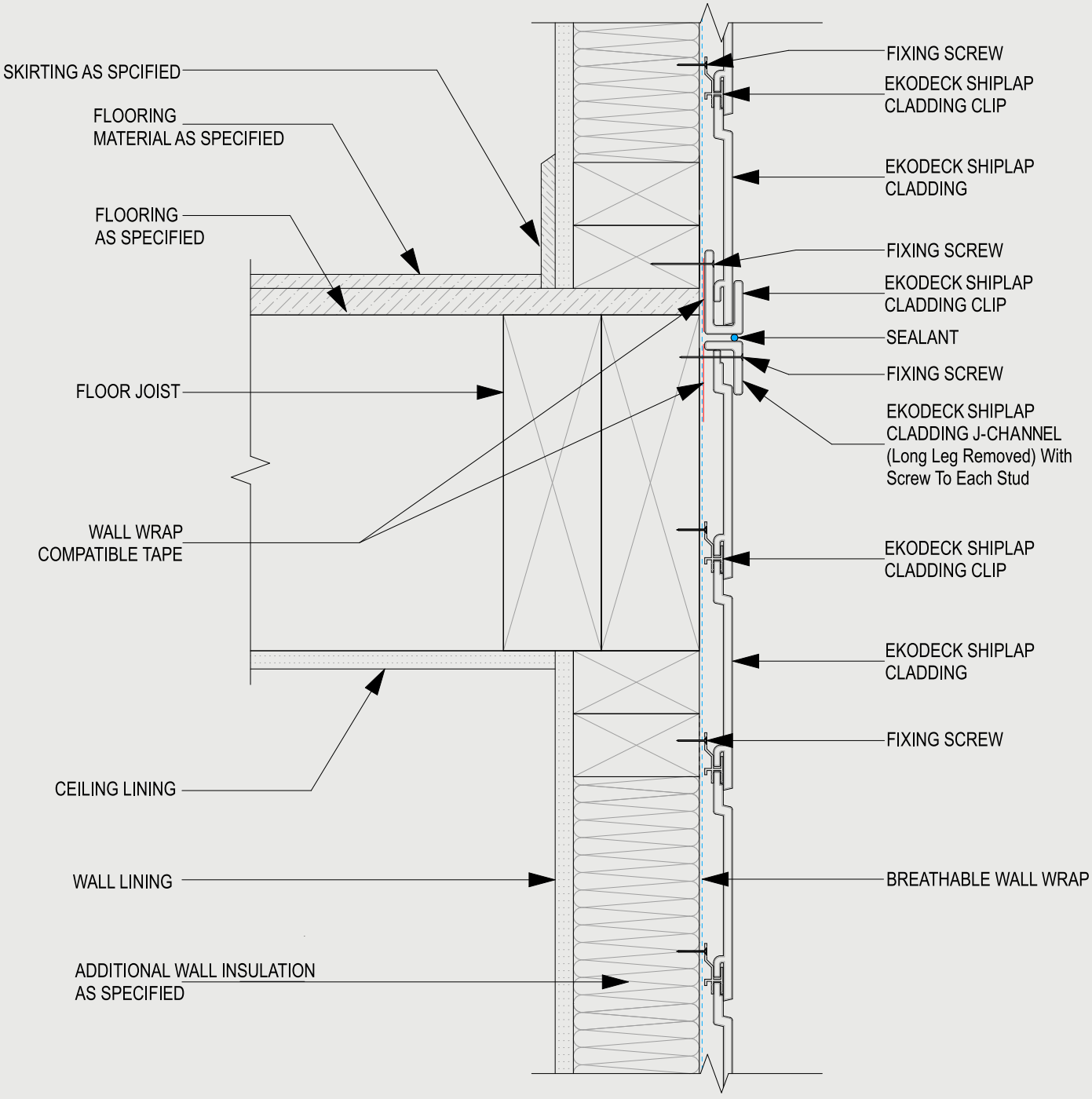
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL CONCRETE SLAB EDGE DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-001	V3.26



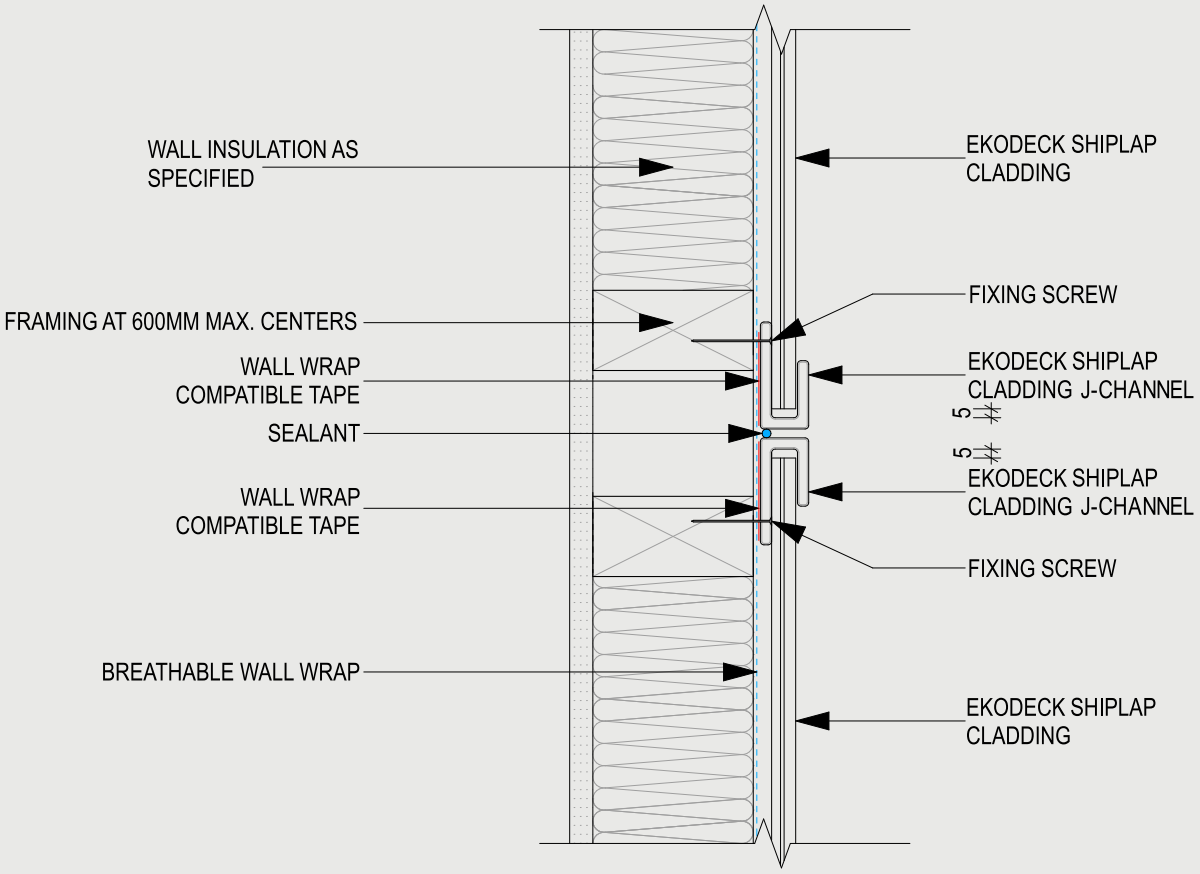
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL WALL TO BALCONY DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-002	V3.26



EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL WALL OVER MASONRY WALL DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-003	V3.26

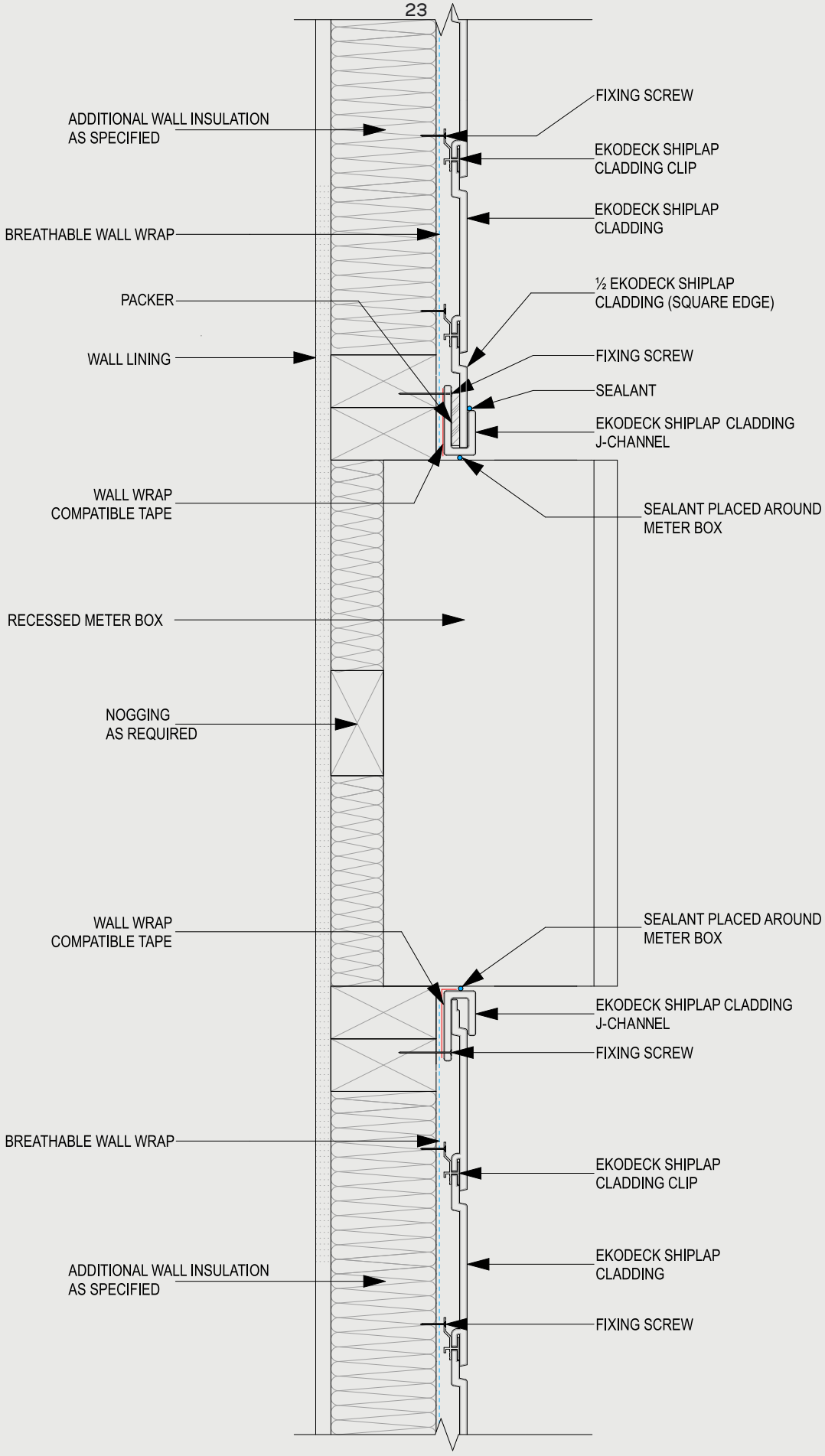


EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL HORIZONTAL EXPANSION JOINT DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-005	V3.26

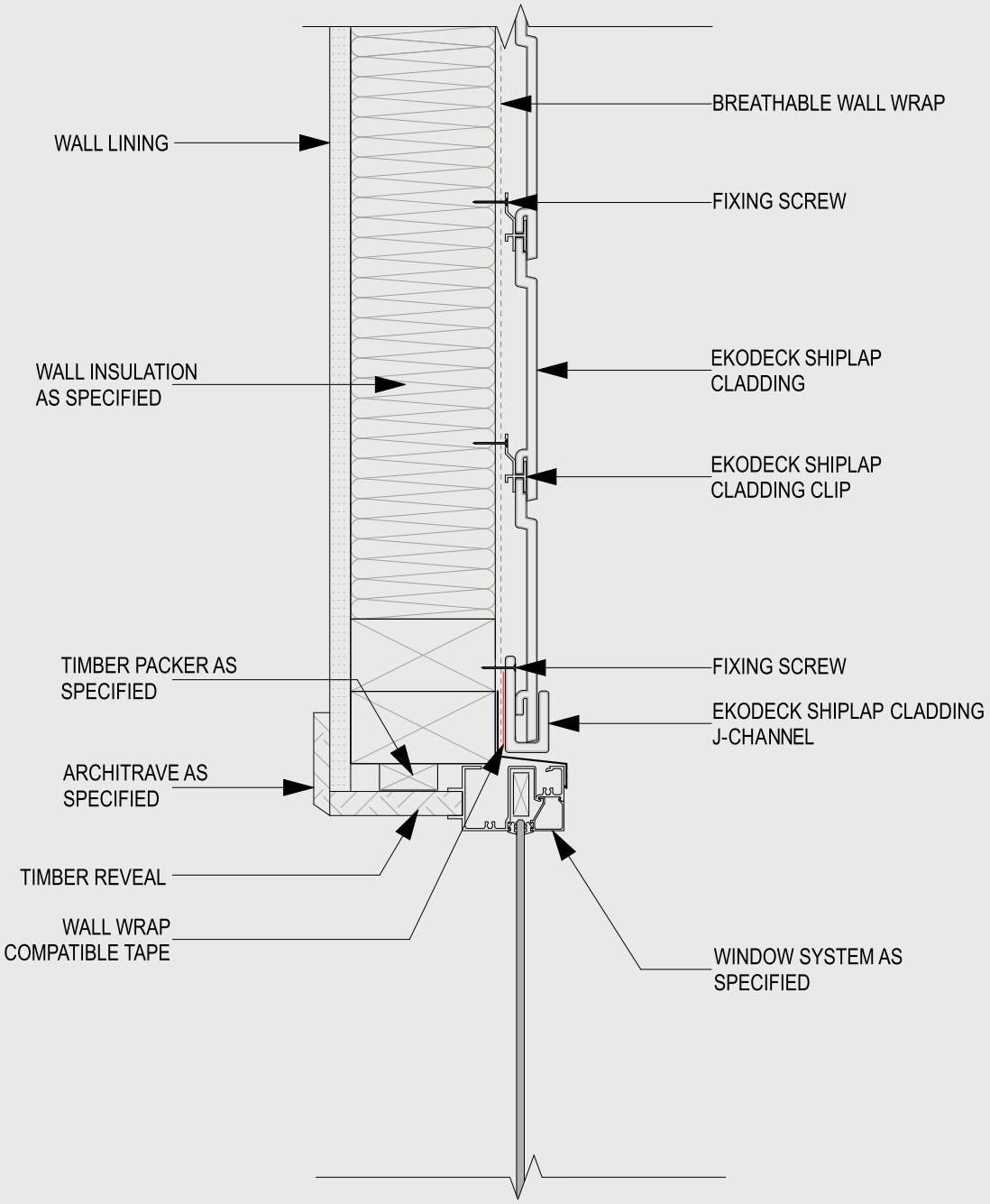


NOTE:
LEAVE 5mm GAP BETWEEN EKODECK SHIPLAP AND J-CHANNEL

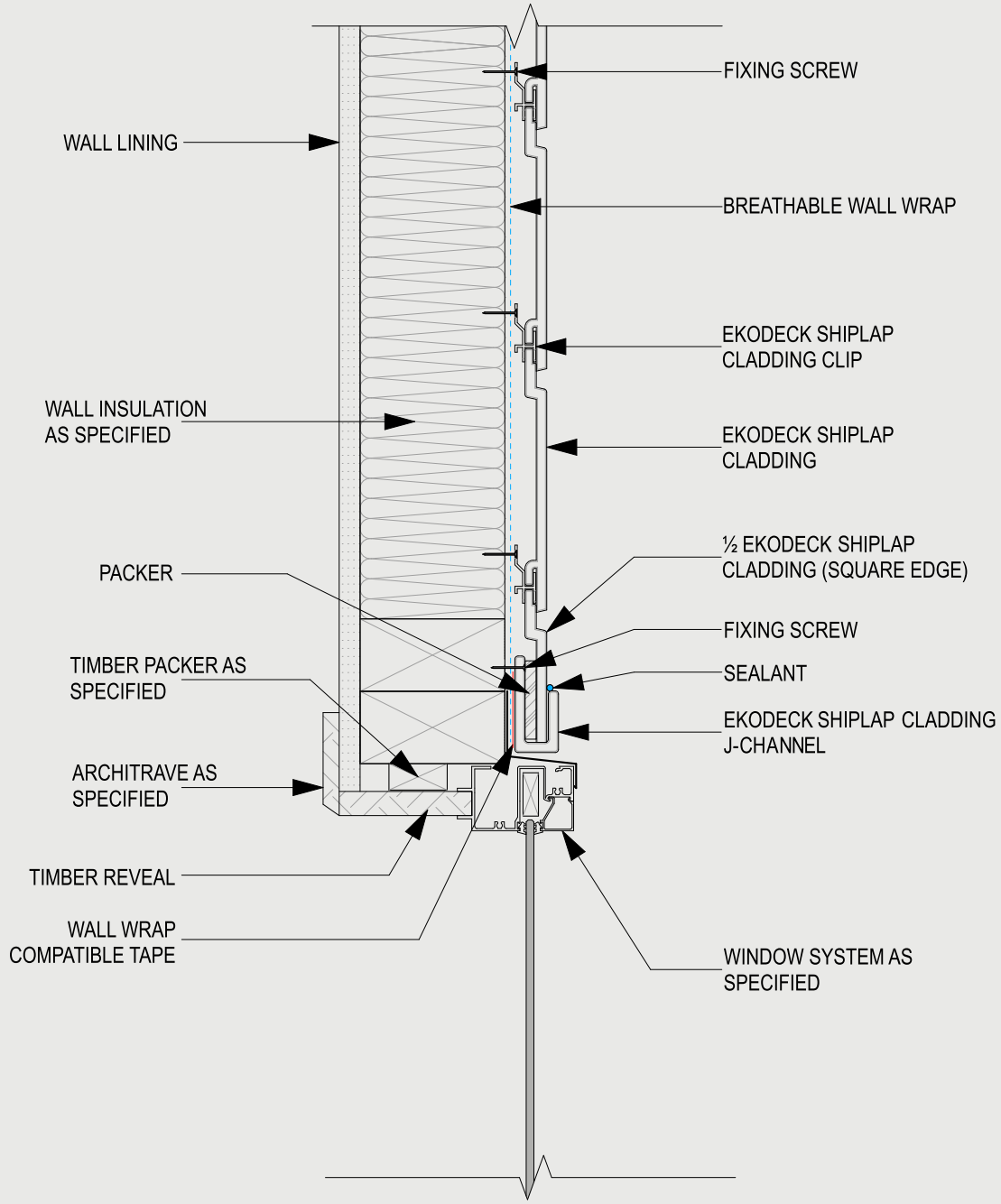
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL VERTICAL EXPANSION JOINT DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-005c	V3.26



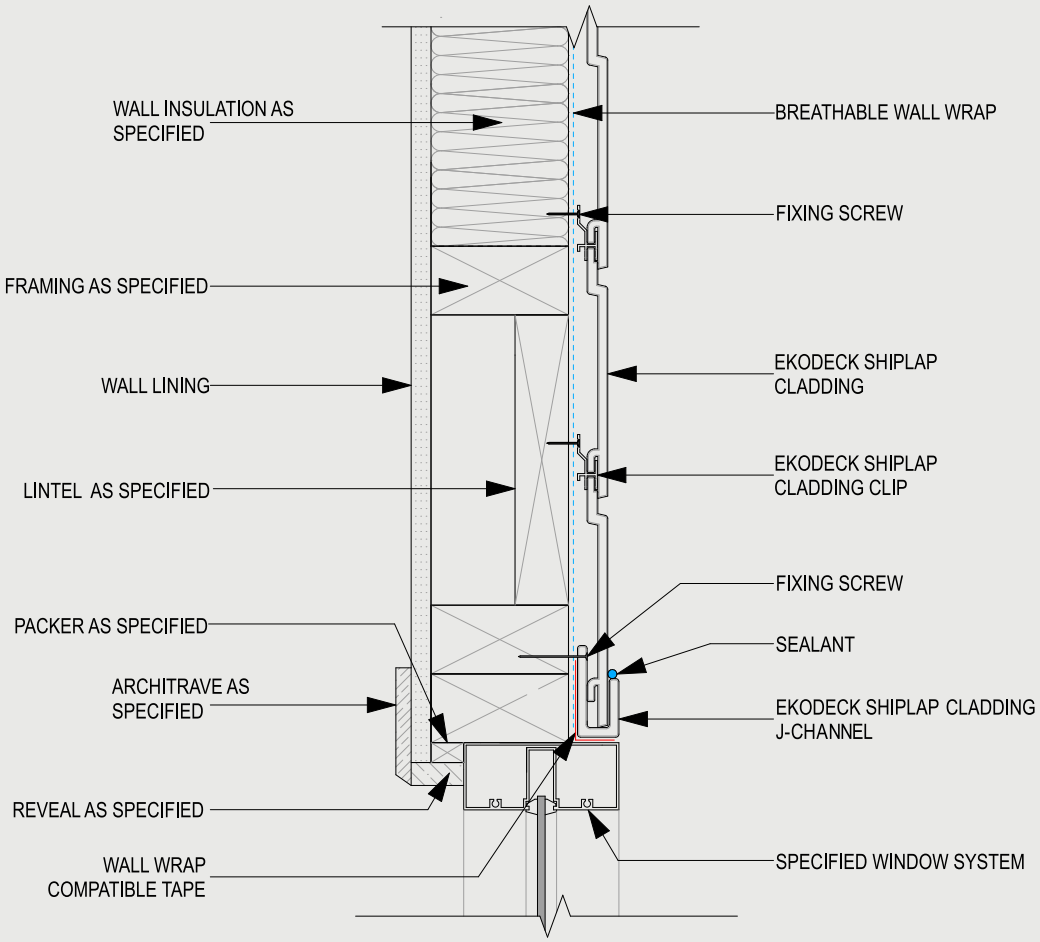
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL METERBOX PENETRATION DETAIL	ORIENTATION: HORIZONTAL	DATE: 31/5/2023
			SCALE: N.T.S	SHEET: EK-007 V3.26



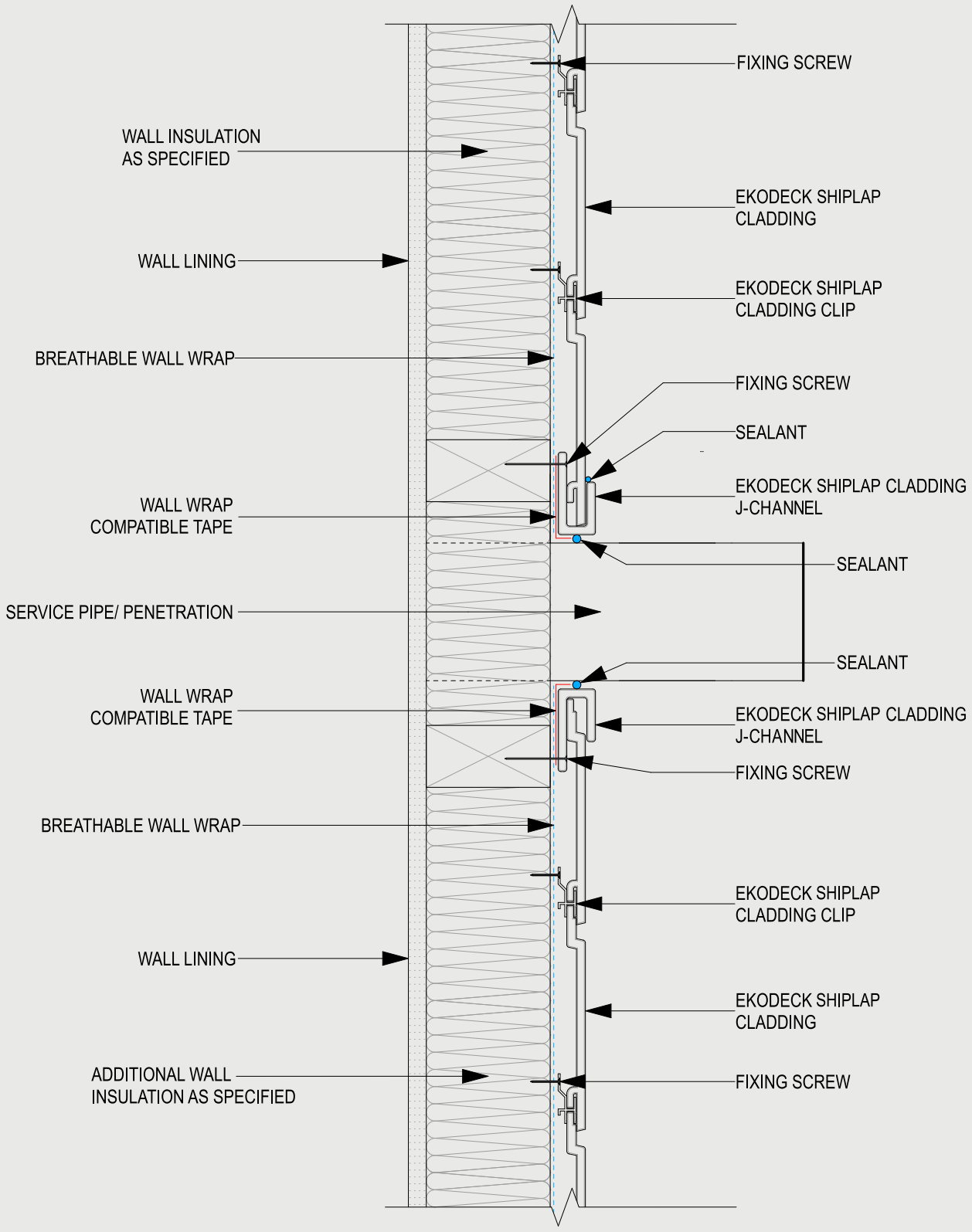
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL WINDOW HEAD DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-008	V3.26



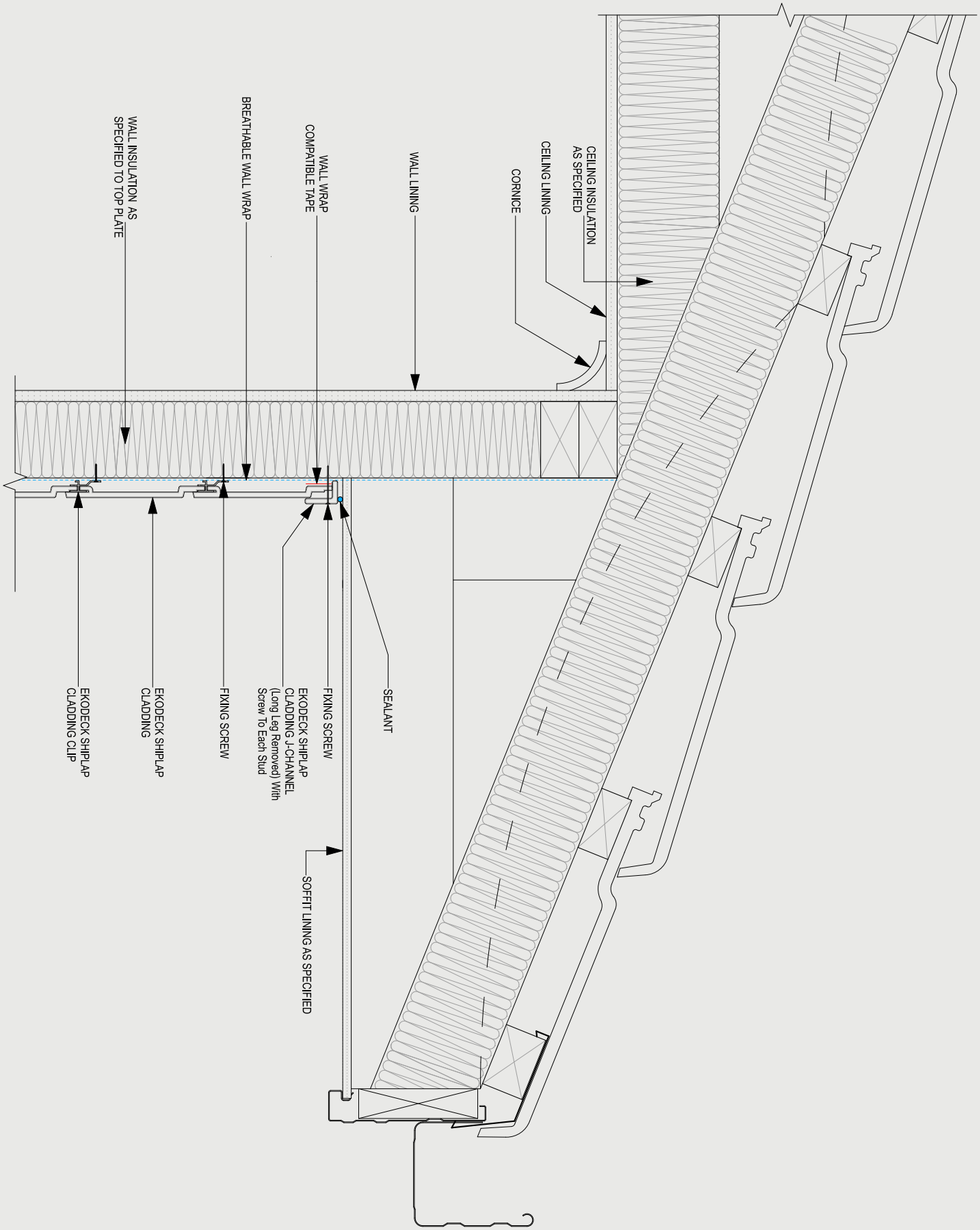
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL WINDOW HEAD DETAIL ½ BOARD	ORIENTATION: HORIZONTAL	DATE: 31/5/2023
			SCALE: N.T.S	SHEET: EK-008c V3.26



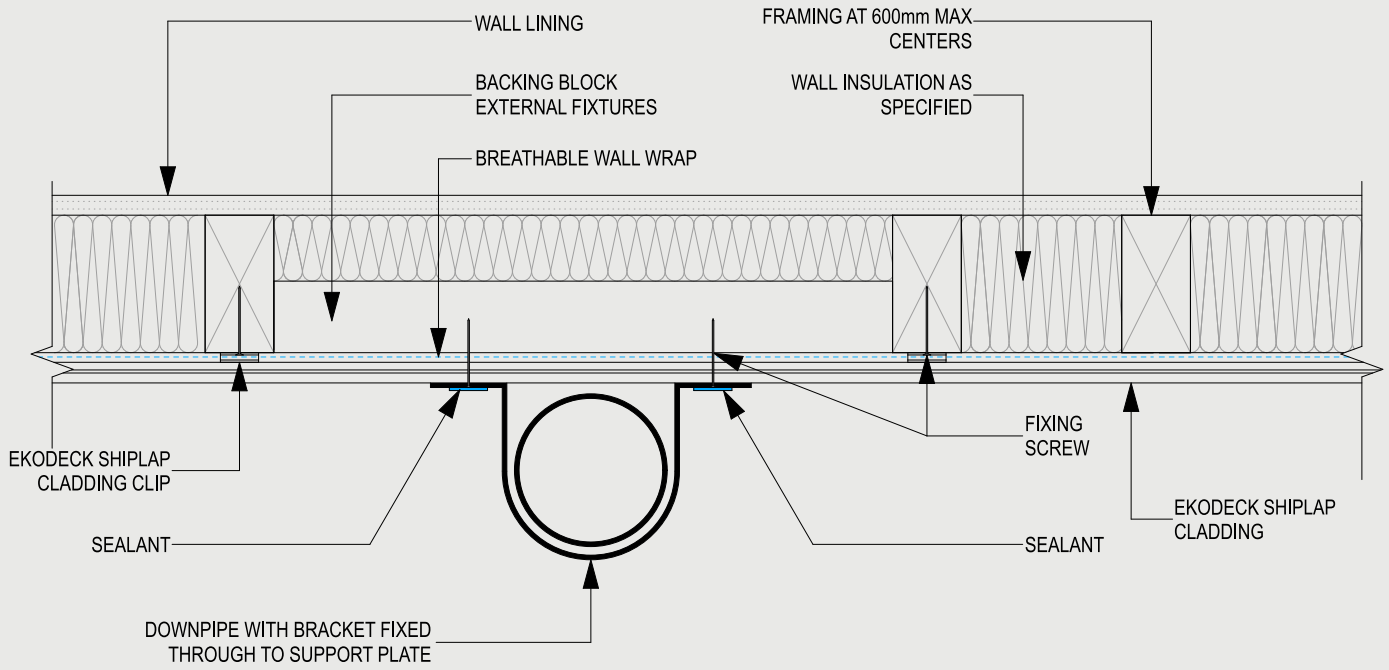
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL WINDOW HEAD DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-008d	V3.26



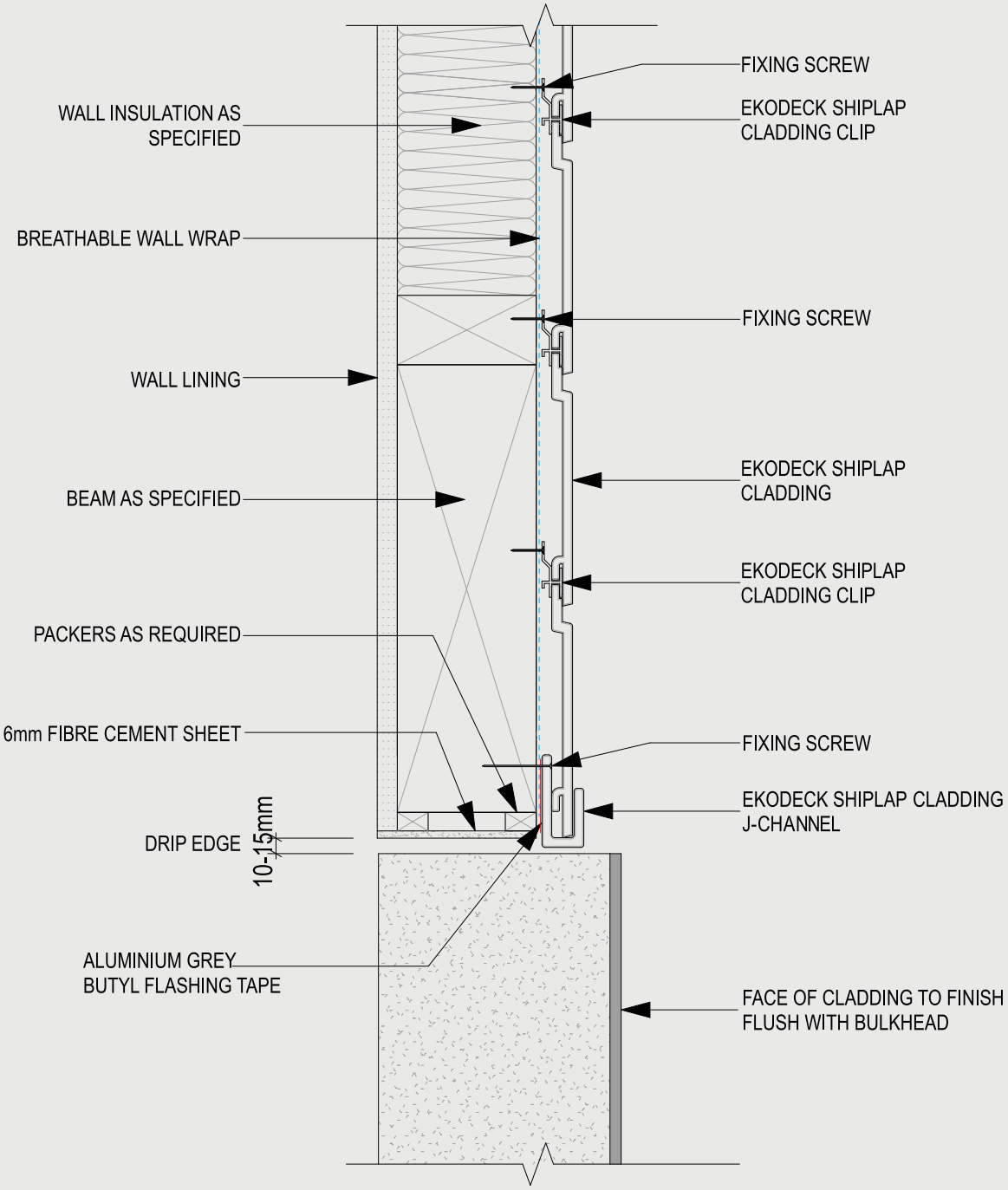
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL SERVICE PENETRATION DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-009	V3.26



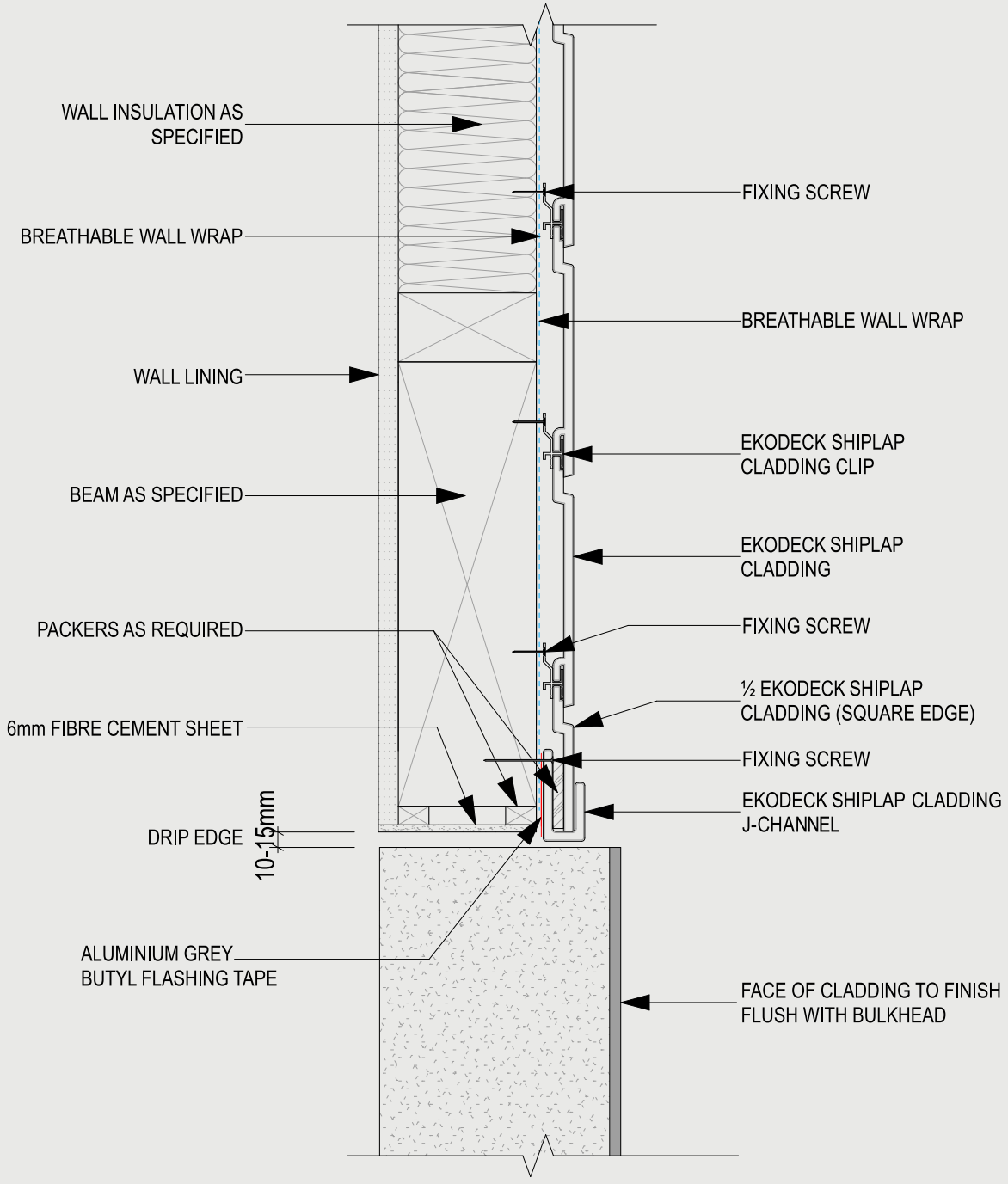
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL EAVE SOFFIT DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-010	V3.26



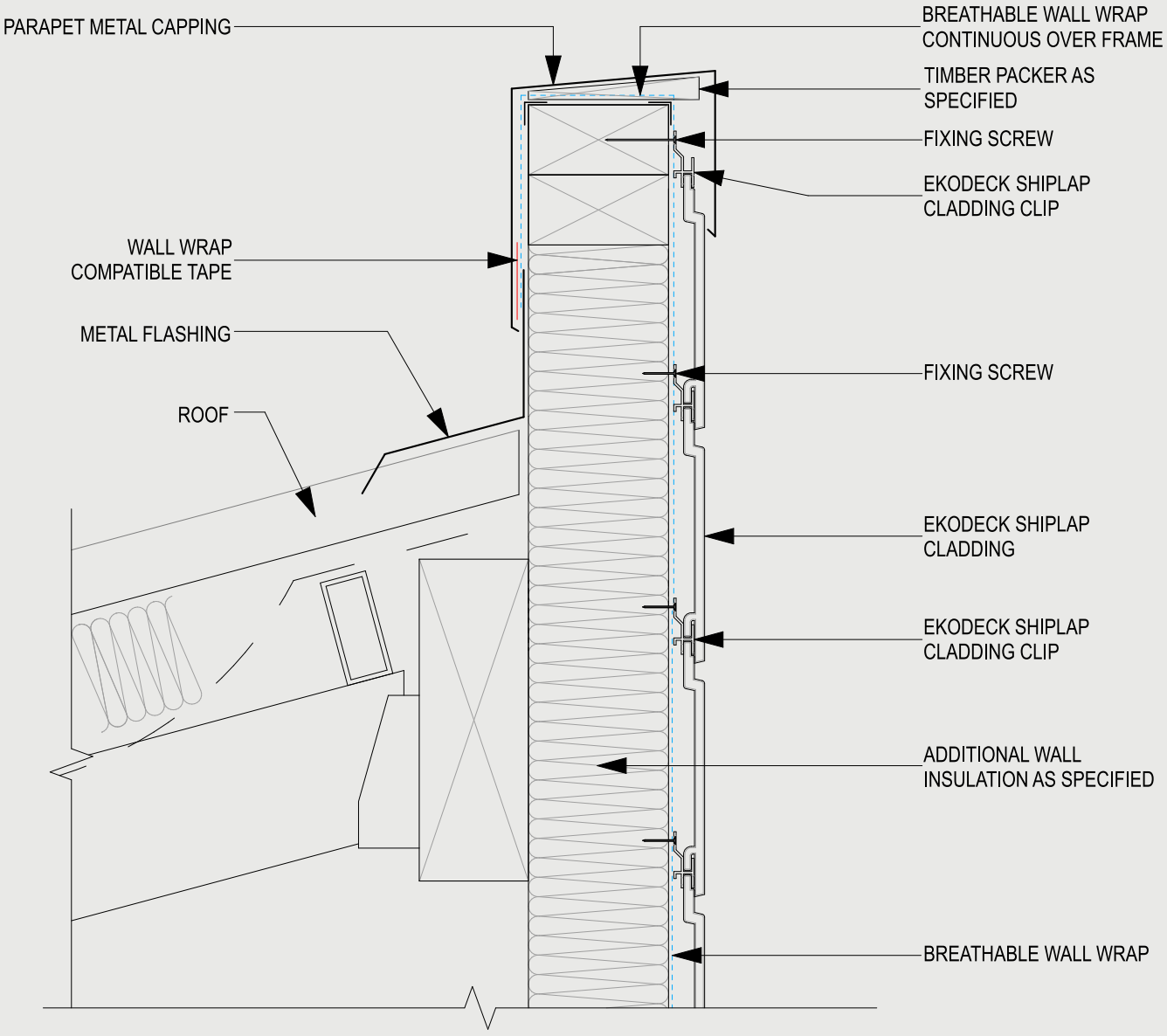
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL DOWNPIPE FIXING DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-011	V3.26



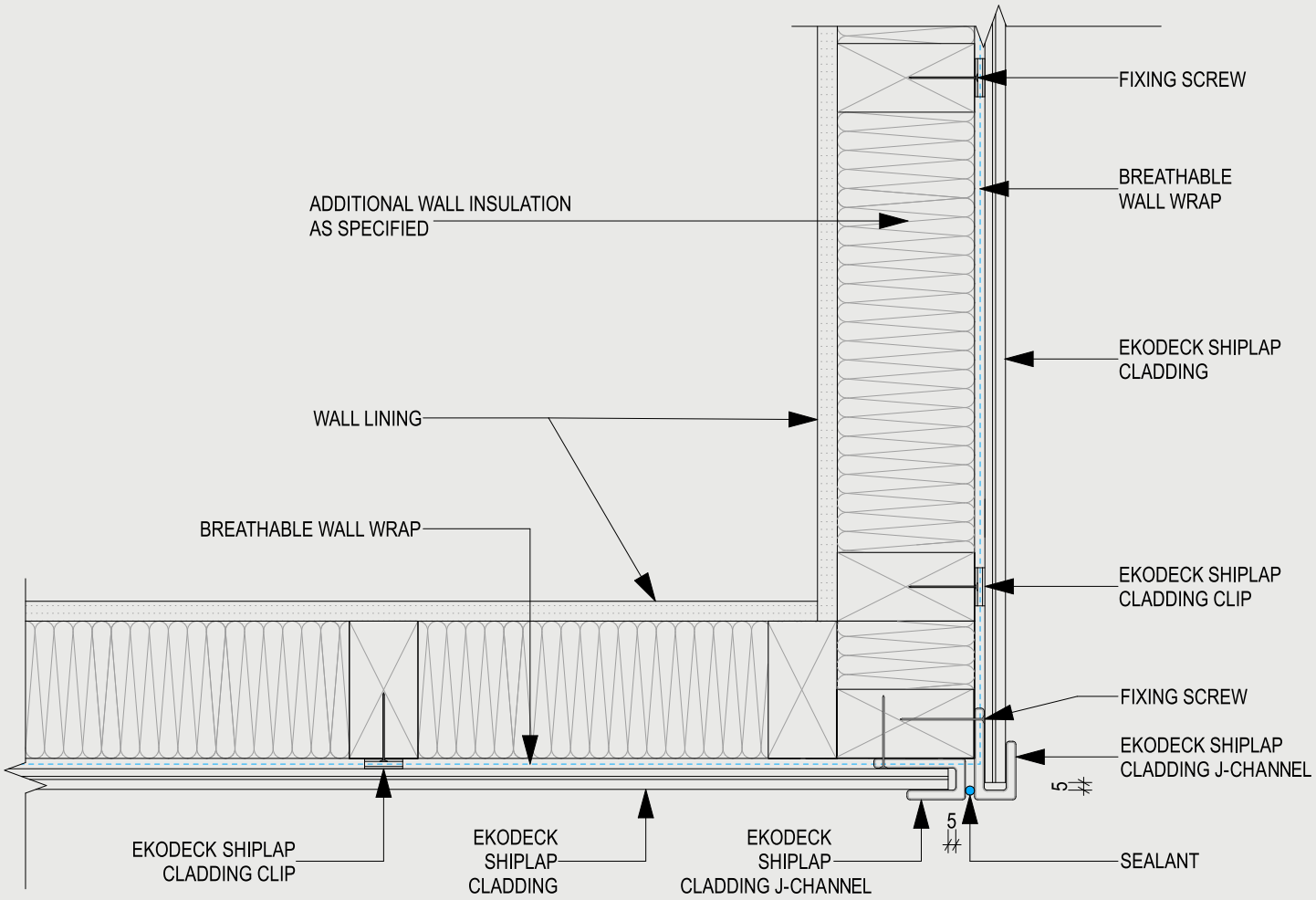
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL GARAGE / BULKHEAD / OVERHANG DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-012	V3.26



EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL GARAGE / BULKHEAD / OVERHANG DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-012b	V3.26

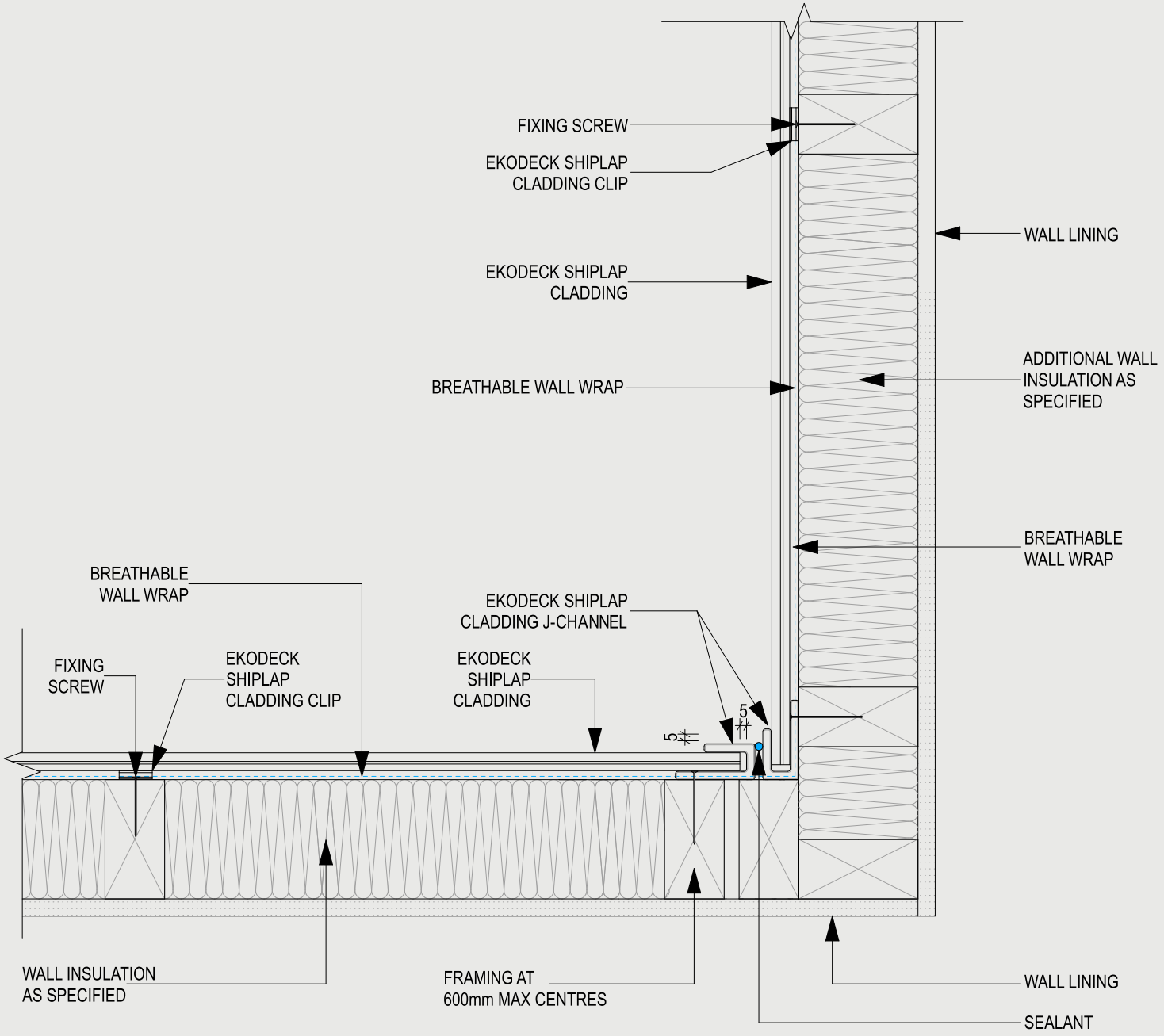


EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL METAL CAPPING PARAPET WALL TO ROOF DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-013	V3.26



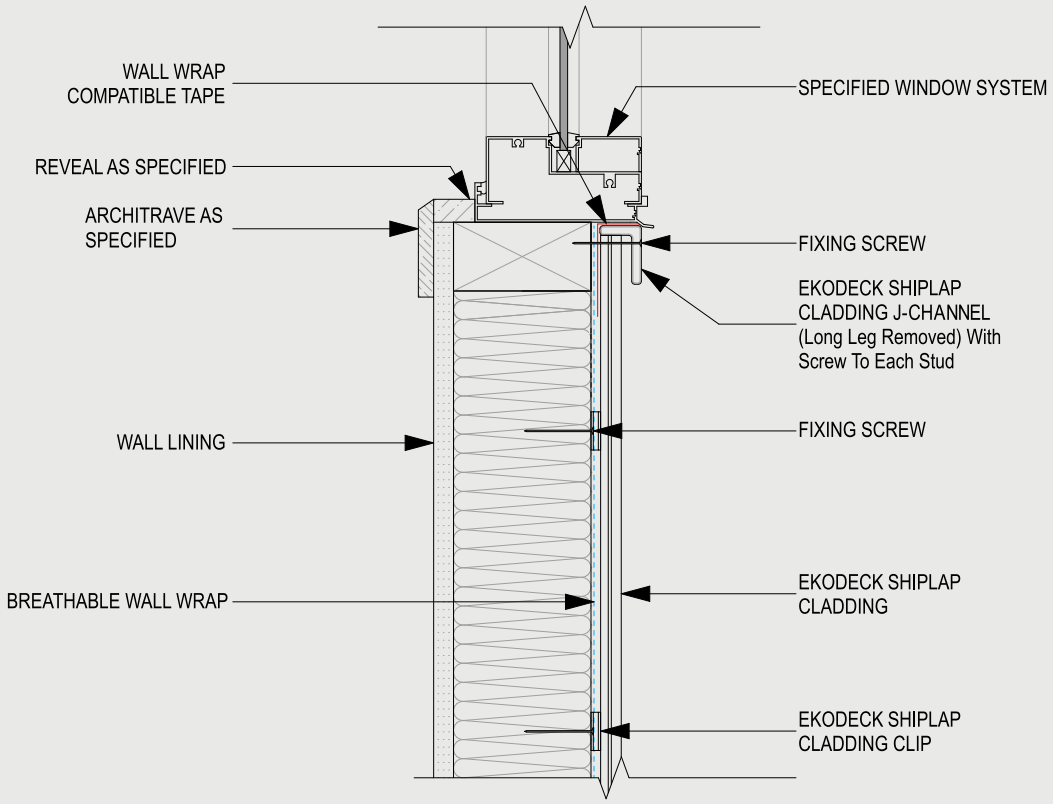
NOTE:
LEAVE 5mm GAP BETWEEN EKODECK SHIPLAP AND J-CHANNEL

EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL EXTERNAL CORNER DETAIL	ORIENTATION: HORIZONTAL	DATE: 31/5/2023
			SCALE: N.T.S	SHEET: EK-014 V3.26

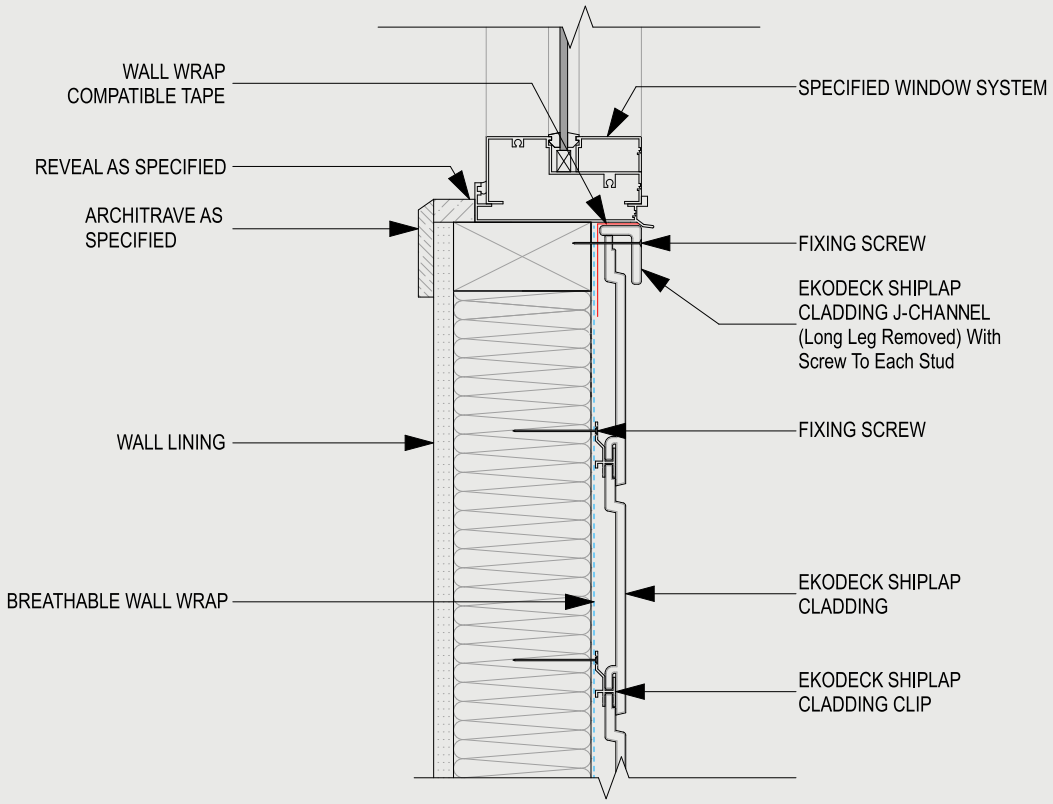


NOTE:
LEAVE 5mm GAP BETWEEN EKODECK SHIPLAP AND J-CHANNEL

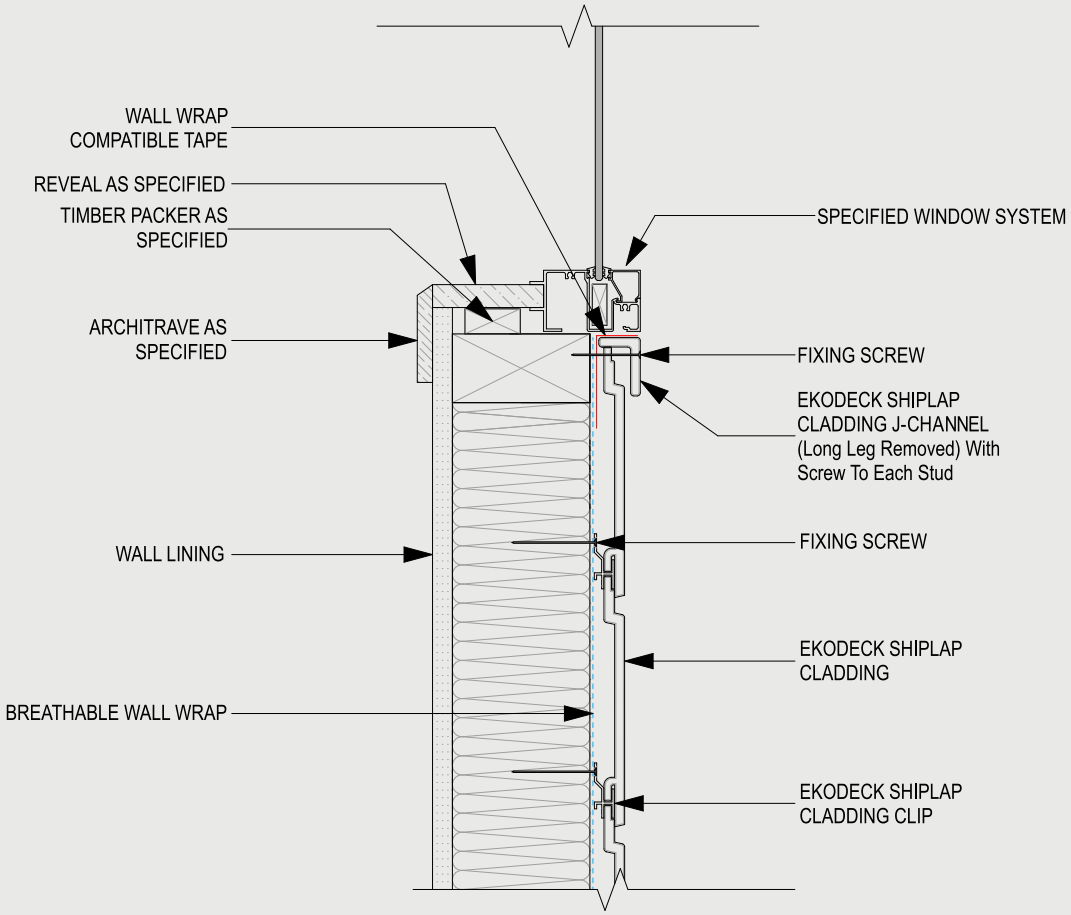
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL INTERNAL CORNER DETAIL	ORIENTATION: HORIZONTAL	DATE: 31/5/2023
			SCALE: N.T.S	SHEET: EK-015 V3.26



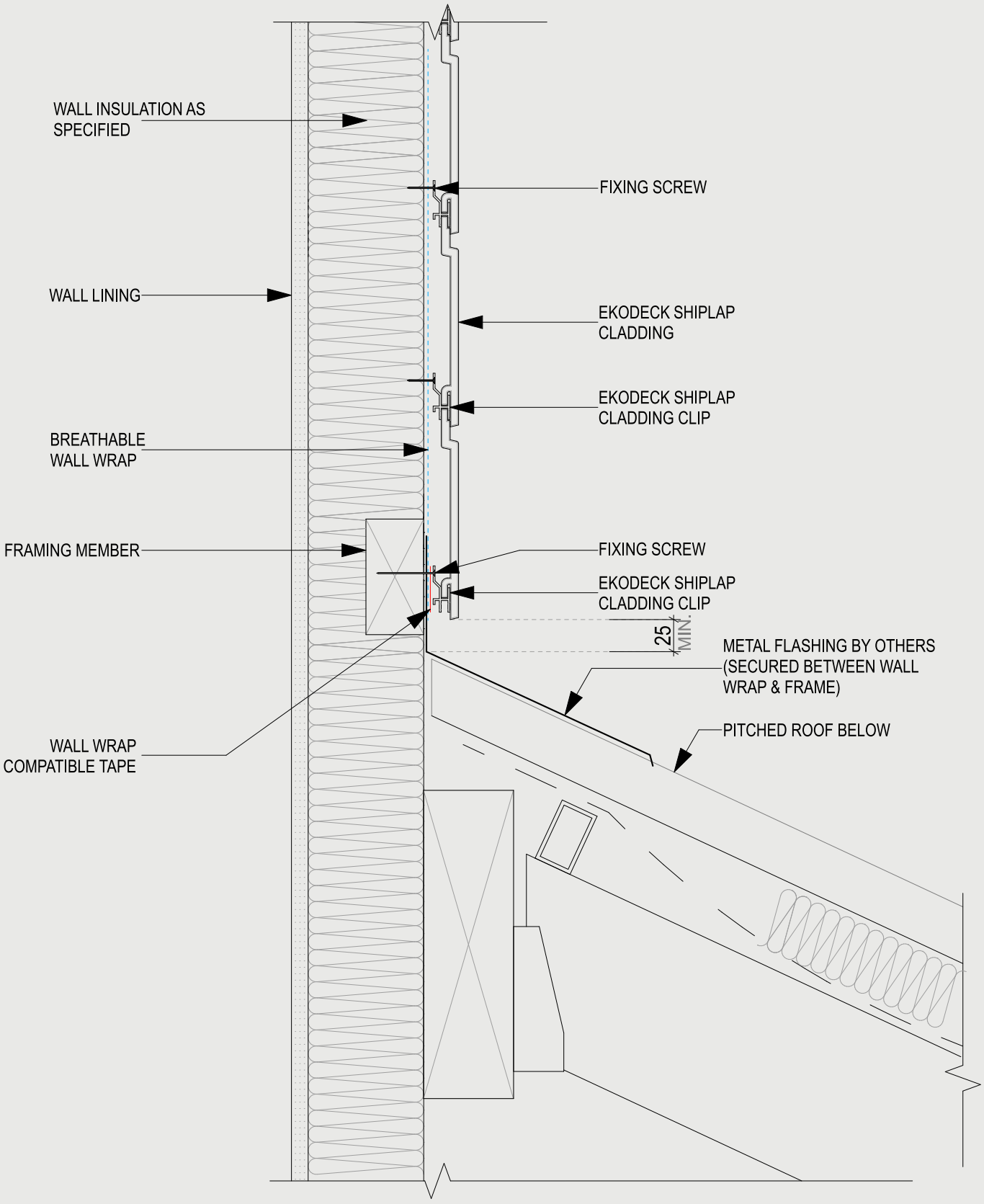
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL WINDOW JAMB DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-016	V3.26



EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL WINDOW SILL DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-016c	V3.26

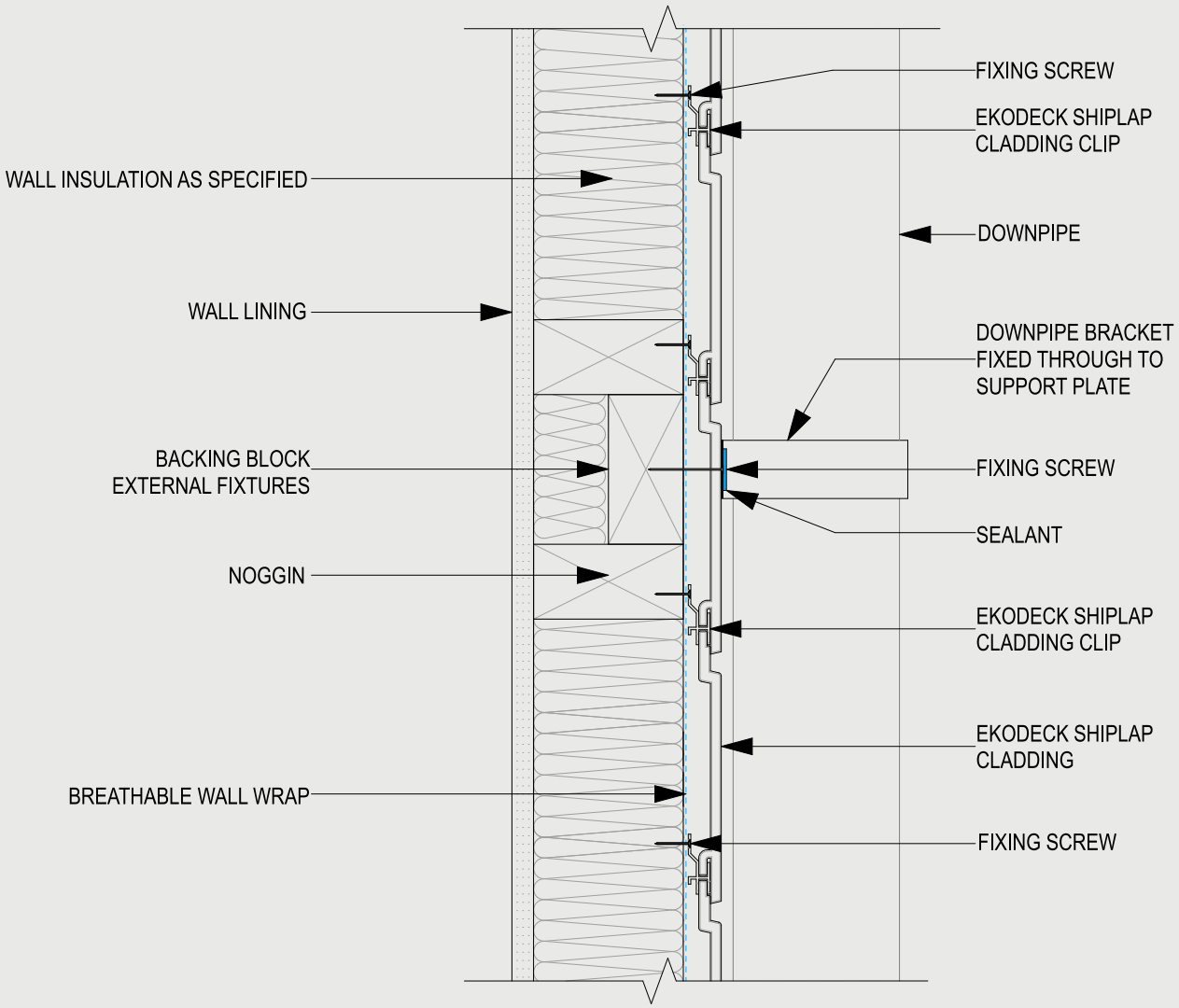


EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL WINDOW SILL DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-016x	V3.26



NOTE:
ALTERNATIVELY SEE "EK-001"

EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL WALL OVER ROOF DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023	
			SCALE N.T.S	SHEET EK-017	V3.26

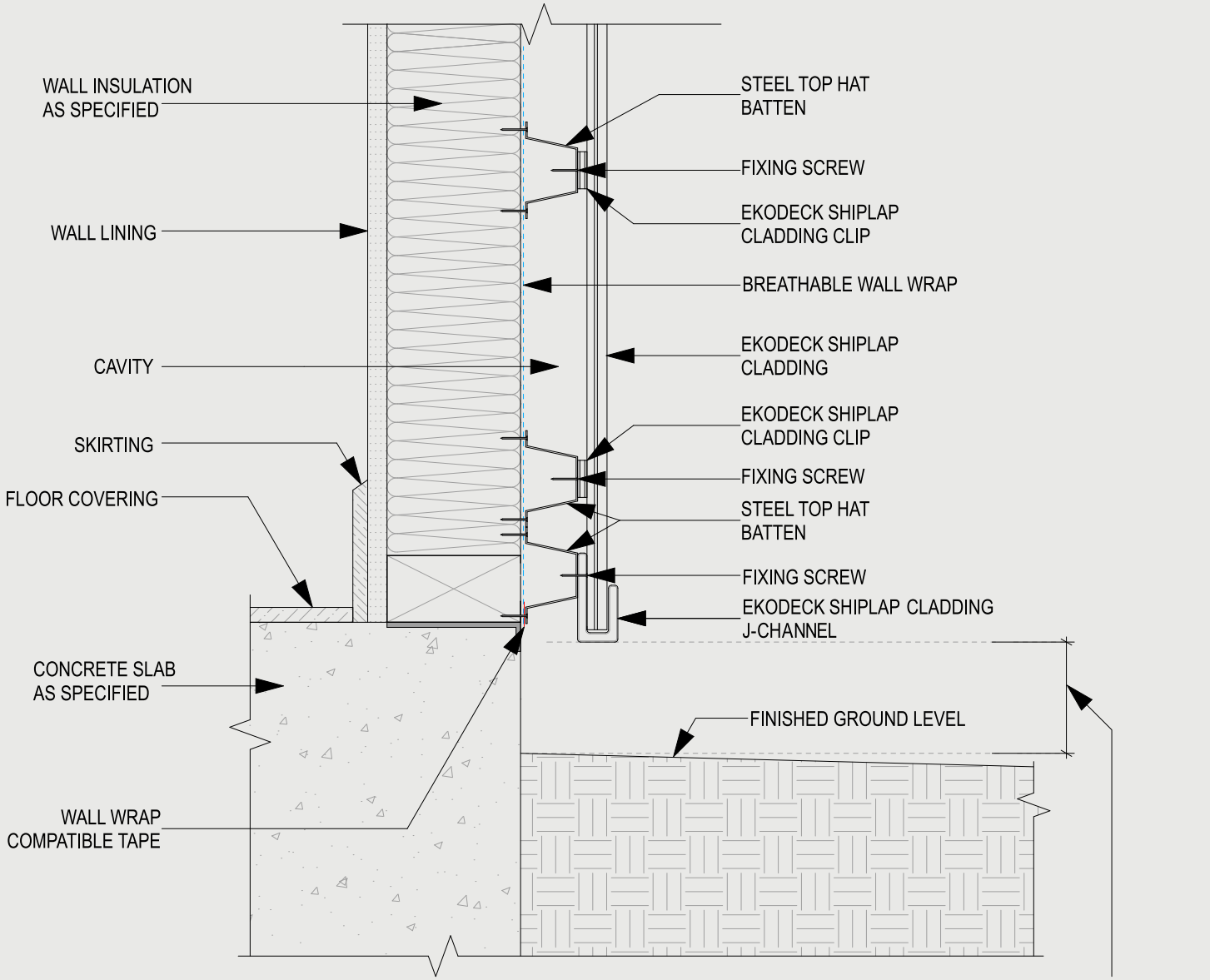


EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL DOWNPIPE FIXING DETAIL	ORIENTATION HORIZONTAL	DATE 31/5/2023
			SCALE N.T.S	SHEET EK-018 V3.26

7 Typical Vertical Construction Details

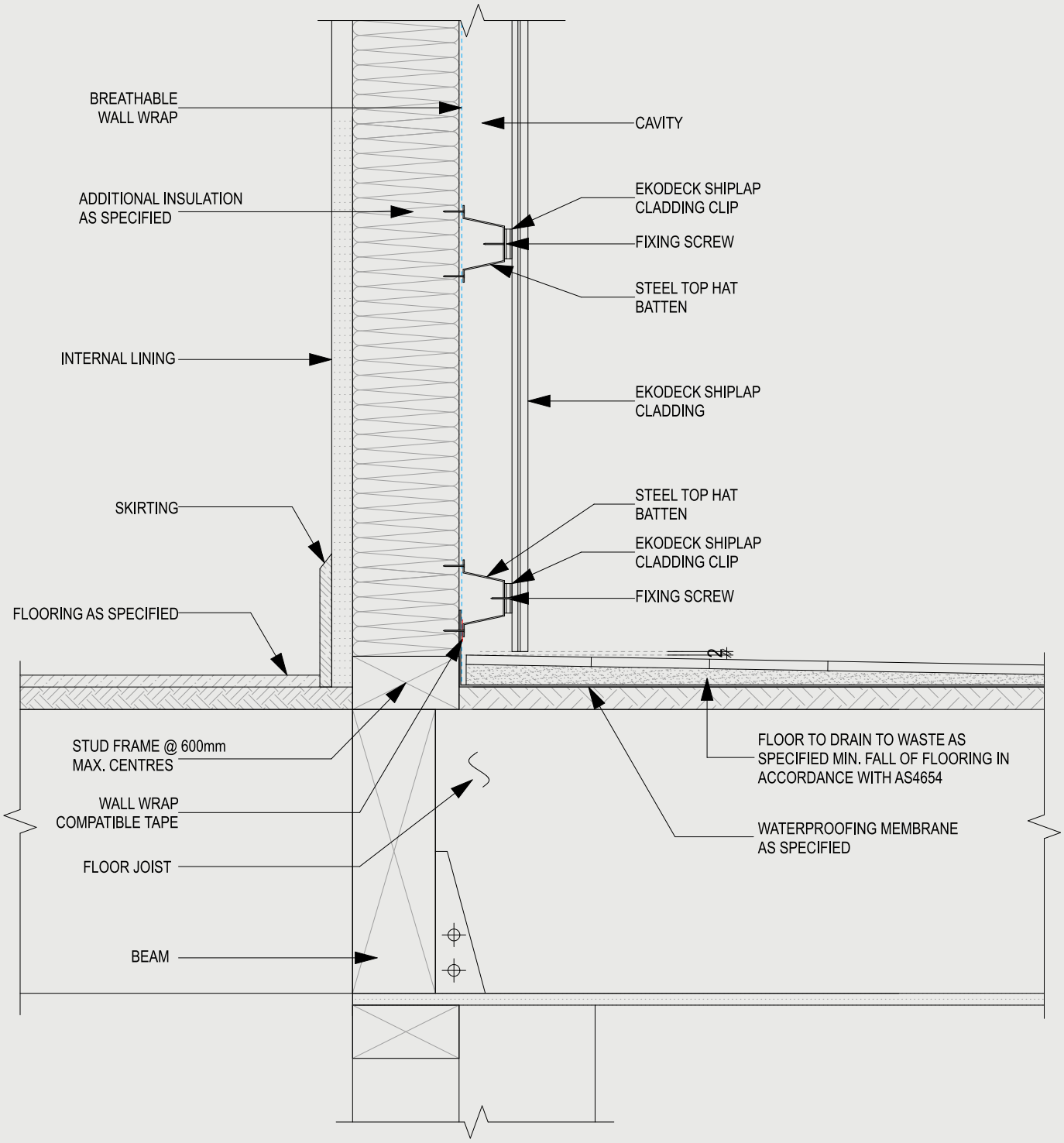
The Ekodeck® Cladding System must be installed in strict accordance with this Technical Guide and comply with all relevant building code, standards, and local government regulations.

These typical construction details are provided as a guide for construction industry professionals. These typical construction details do not constitute a project specific specification and should only be used within the context of project specifications.

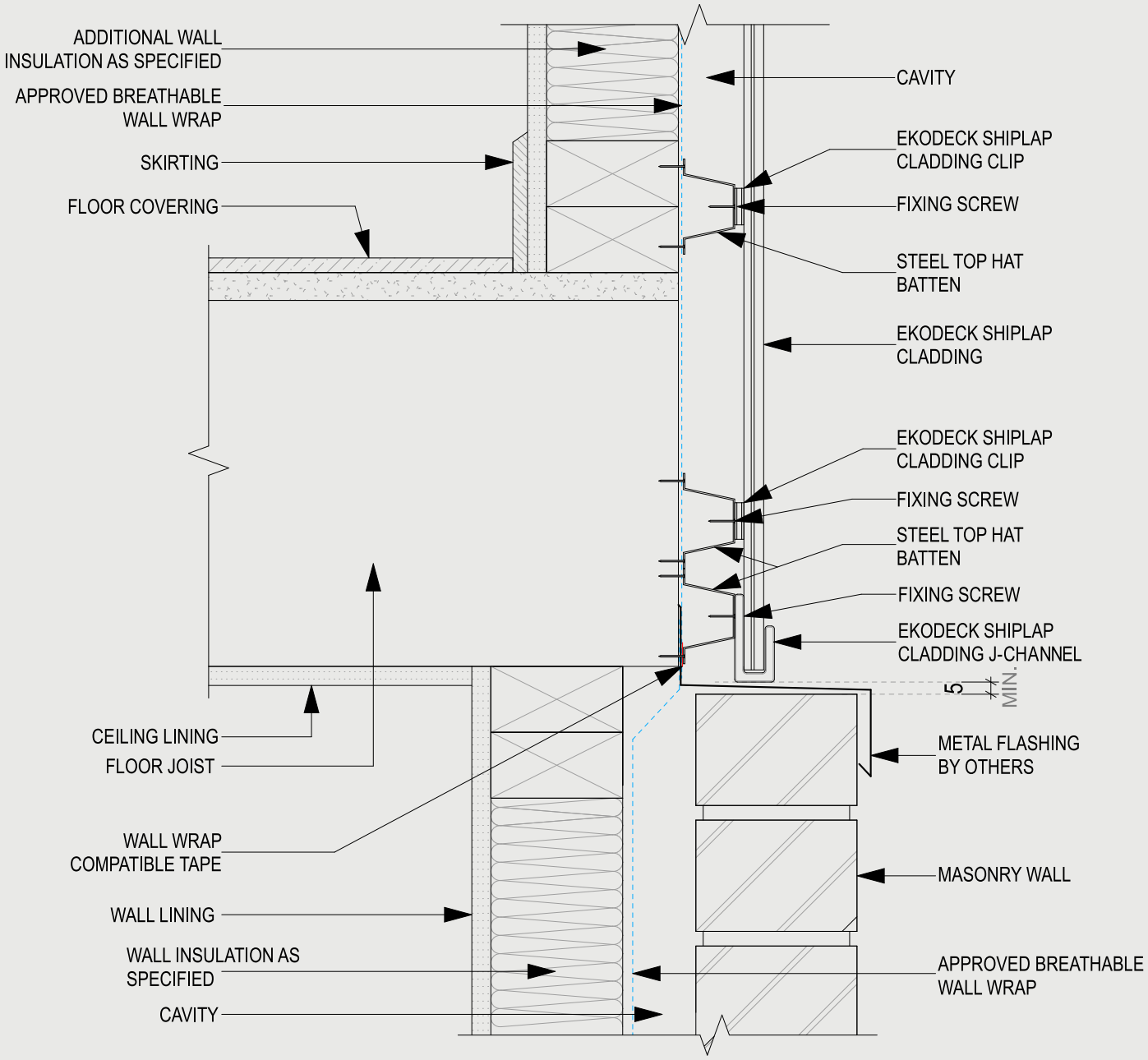


CLEARANCE AS PER THE BCA REQUIREMENTS FOR THE INTENDED APPLICATION
e.g. as per the specifications in Part 7.5.7 of the ABCB Housing Provisions

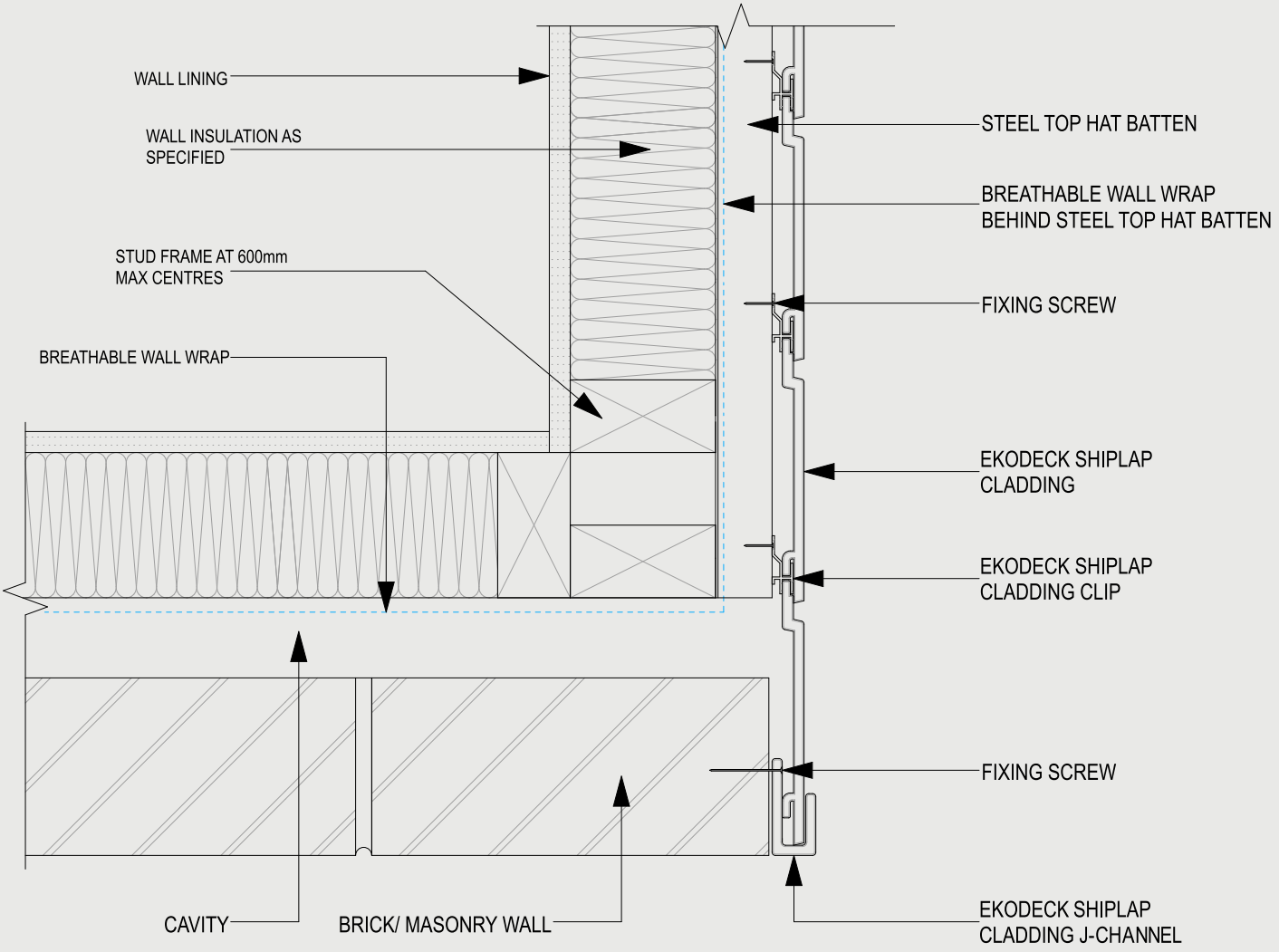
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL CONCRETE SLAB EDGE DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023	
			SCALE N.T.S	SHEET EK-001a	V3.26



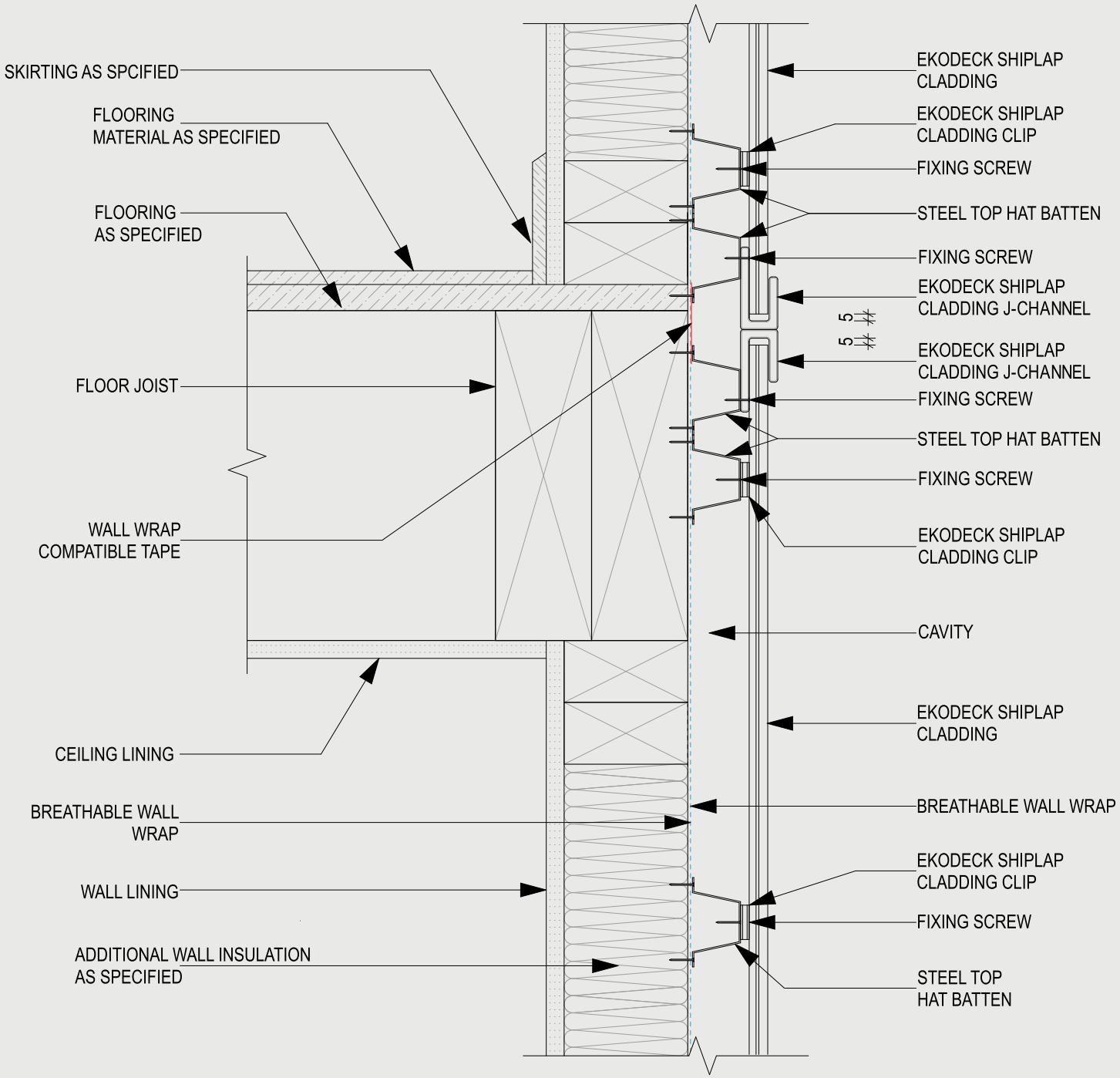
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL WALL TO BALCONY DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023
			SCALE N.T.S	SHEET EK-002a V3.26



EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL WALL OVER MASONRY WALL DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023	
			SCALE N.T.S	SHEET EK-003a	V3.26

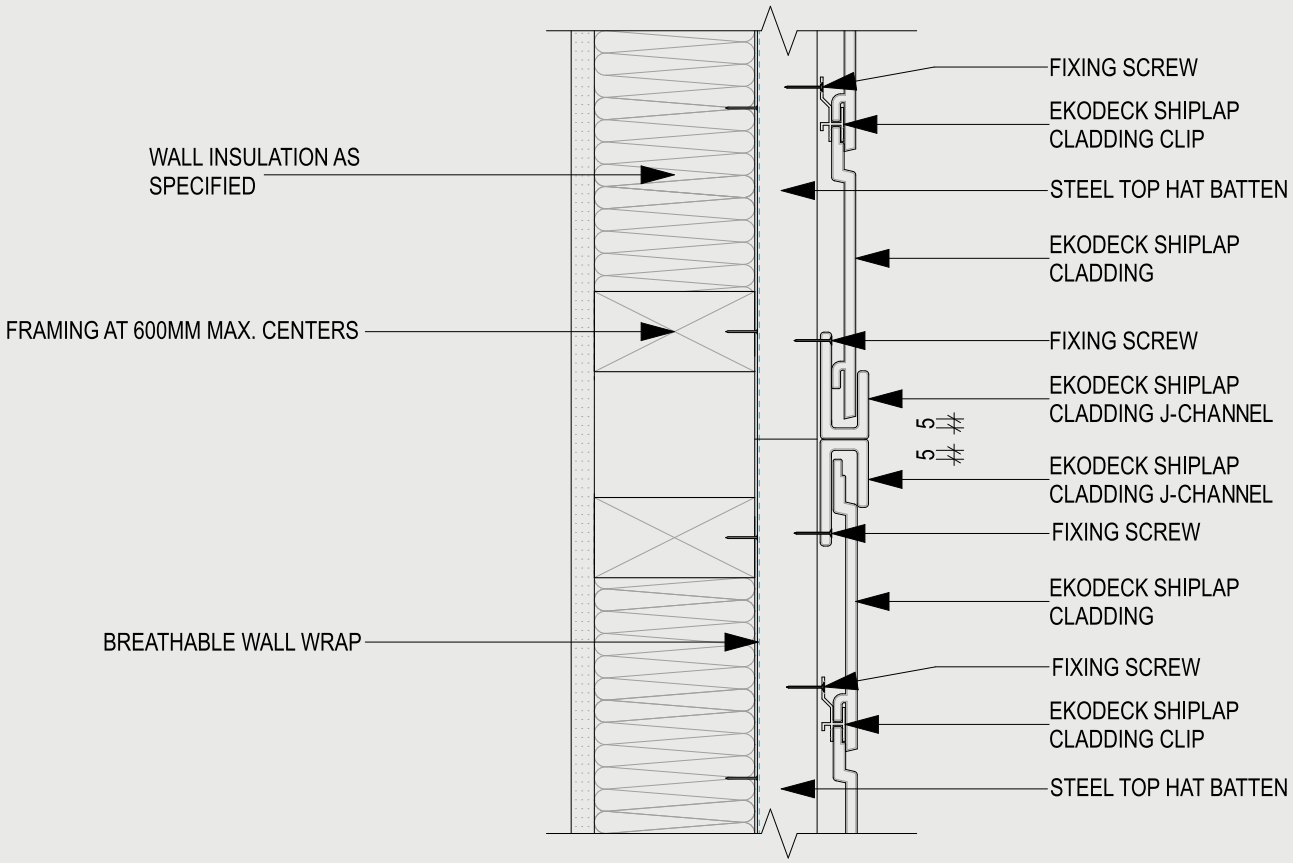


EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL JUNCTION TO MASONRY WALL DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023	
			SCALE N.T.S	SHEET EK-004	V3.26



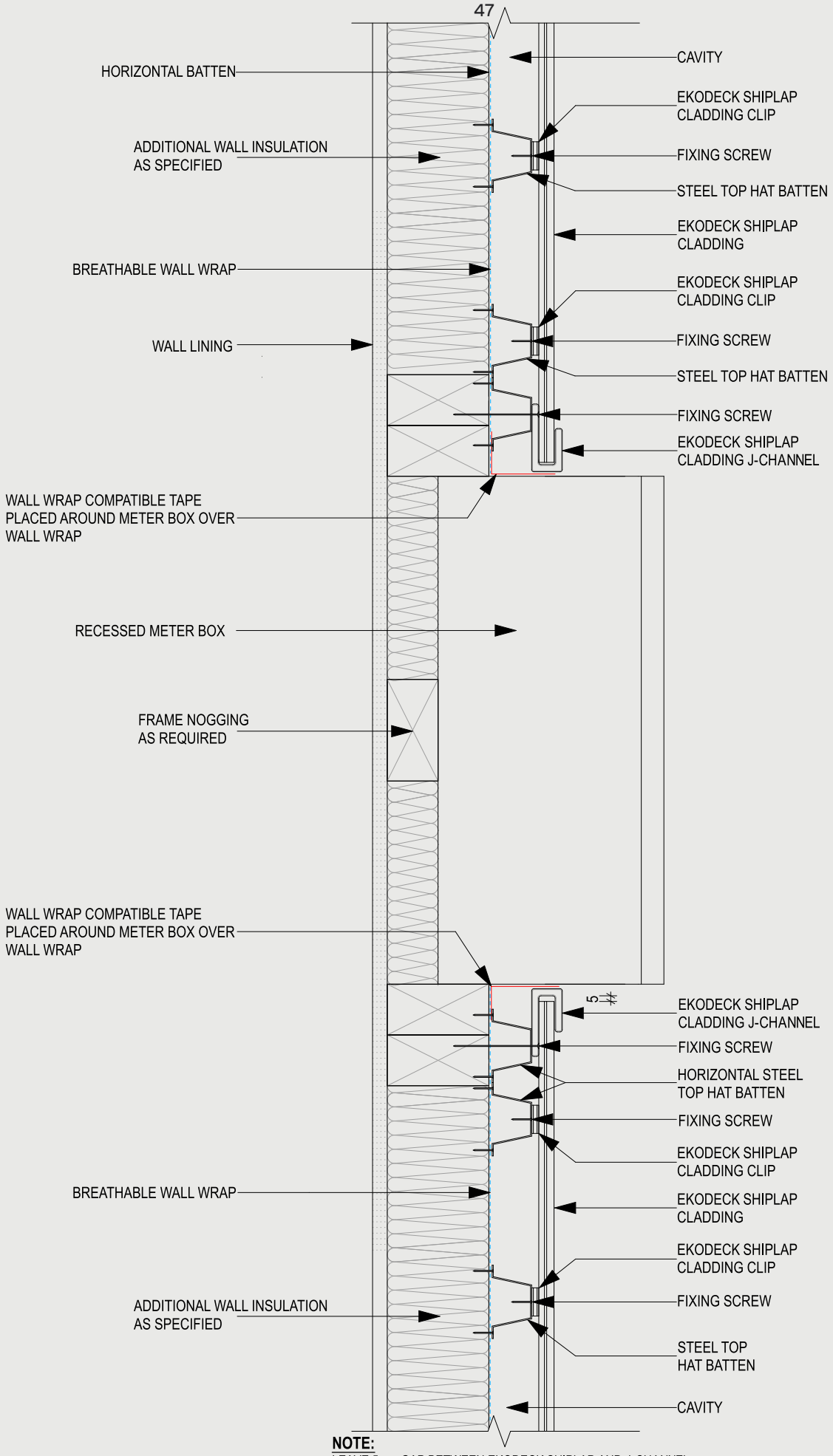
NOTE:
LEAVE 5mm GAP BETWEEN EKODECK SHIPLAP AND J-CHANNEL

EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL HORIZONTAL EXPANSION JOINT DETAIL	ORIENTATION: VERTICAL	DATE: 23/5/2023
			SCALE: N.T.S	SHEET: EK-005a V3.26



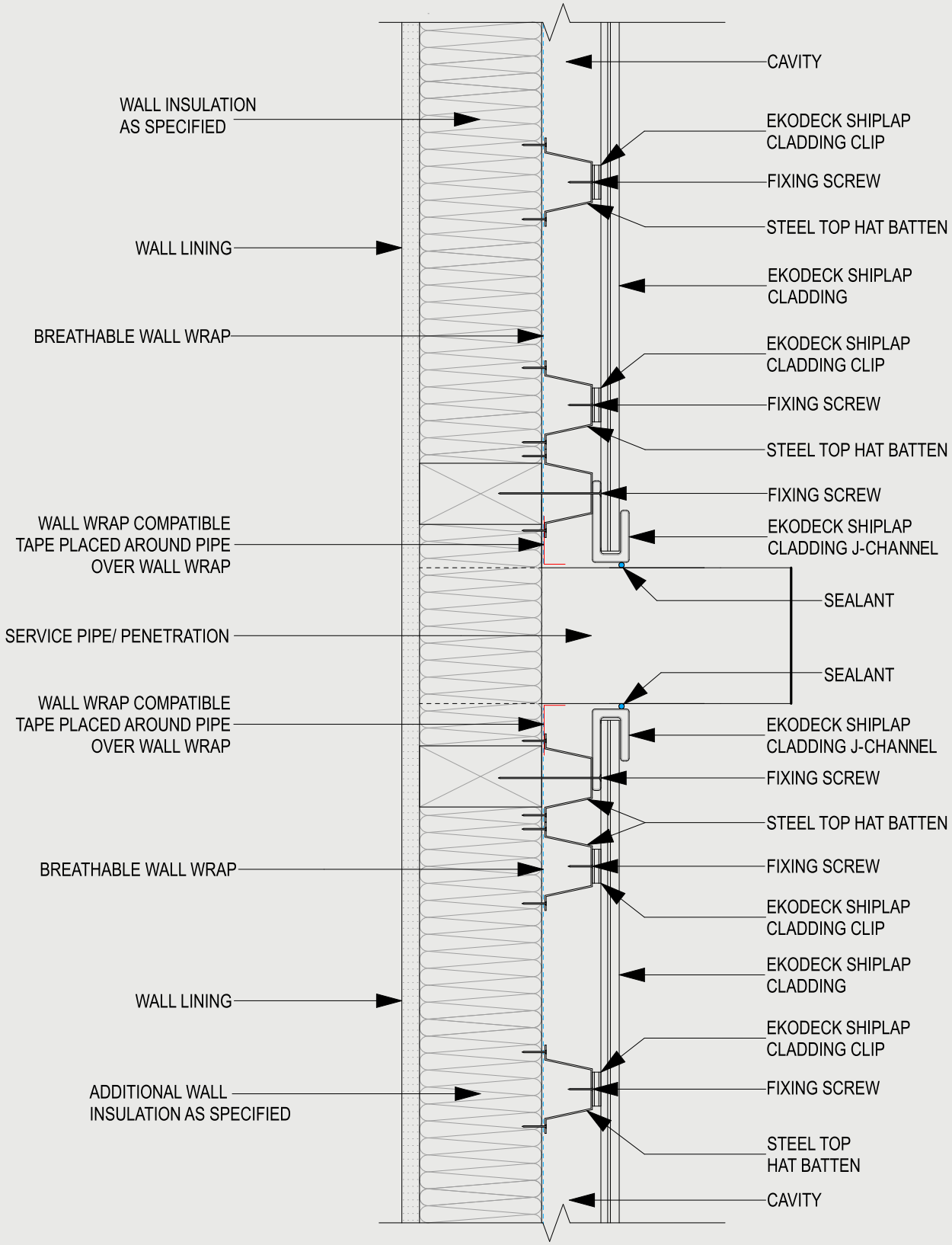
NOTE:
LEAVE 5mm GAP BETWEEN EKODECK SHIPLAP AND J-CHANNEL

EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL VERTICAL EXPANSION JOINT DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023	
			SCALE N.T.S	SHEET EK-005b	V3.26

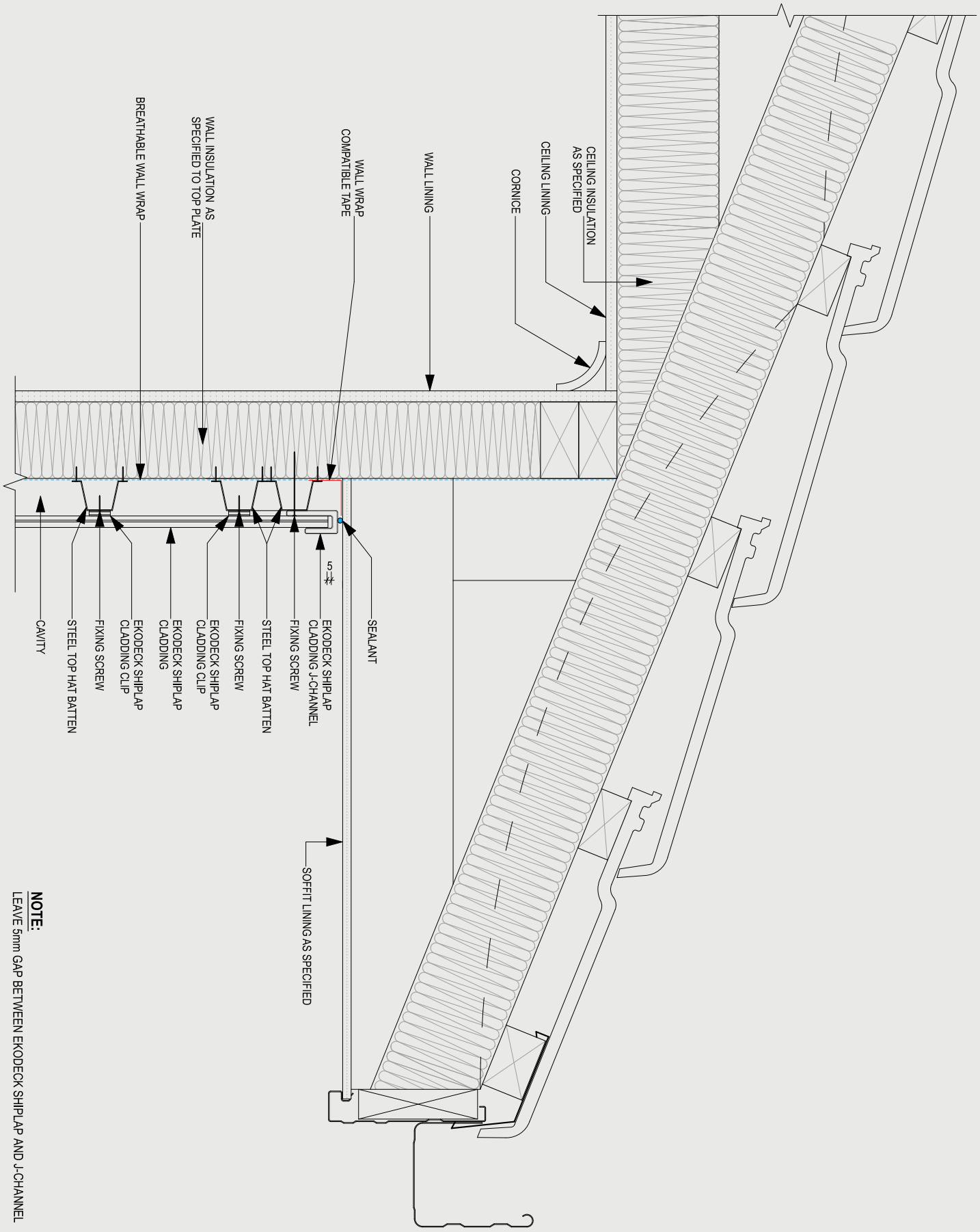


NOTE:
LEAVE 5mm GAP BETWEEN EKODECK SHIPLAP AND J-CHANNEL

EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL METERBOX PENETRATION DETAIL	ORIENTATION: VERTICAL	DATE: 23/5/2023
			SCALE: N.T.S	SHEET: EK-007a V3.26

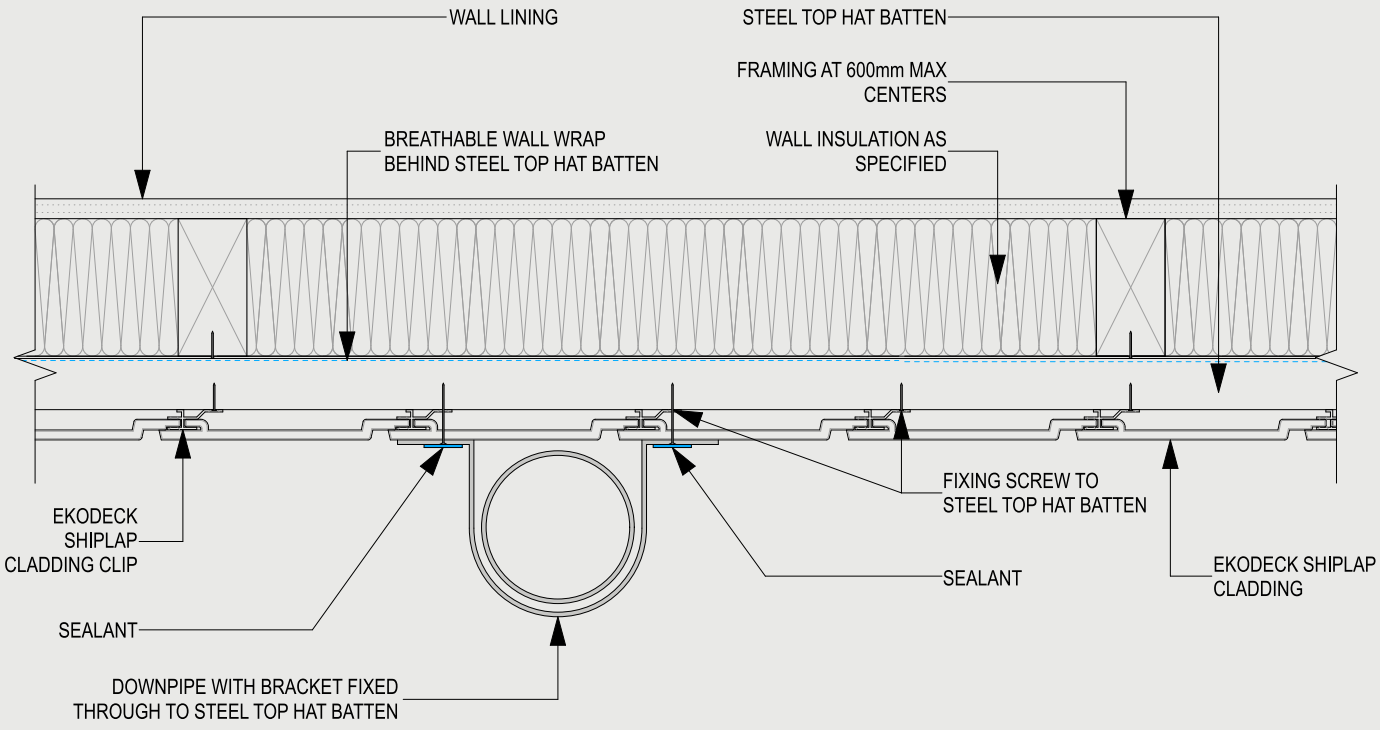


EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL SERVICE PENETRATION DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023	
			SCALE N.T.S	SHEET EK-009a	V3.26

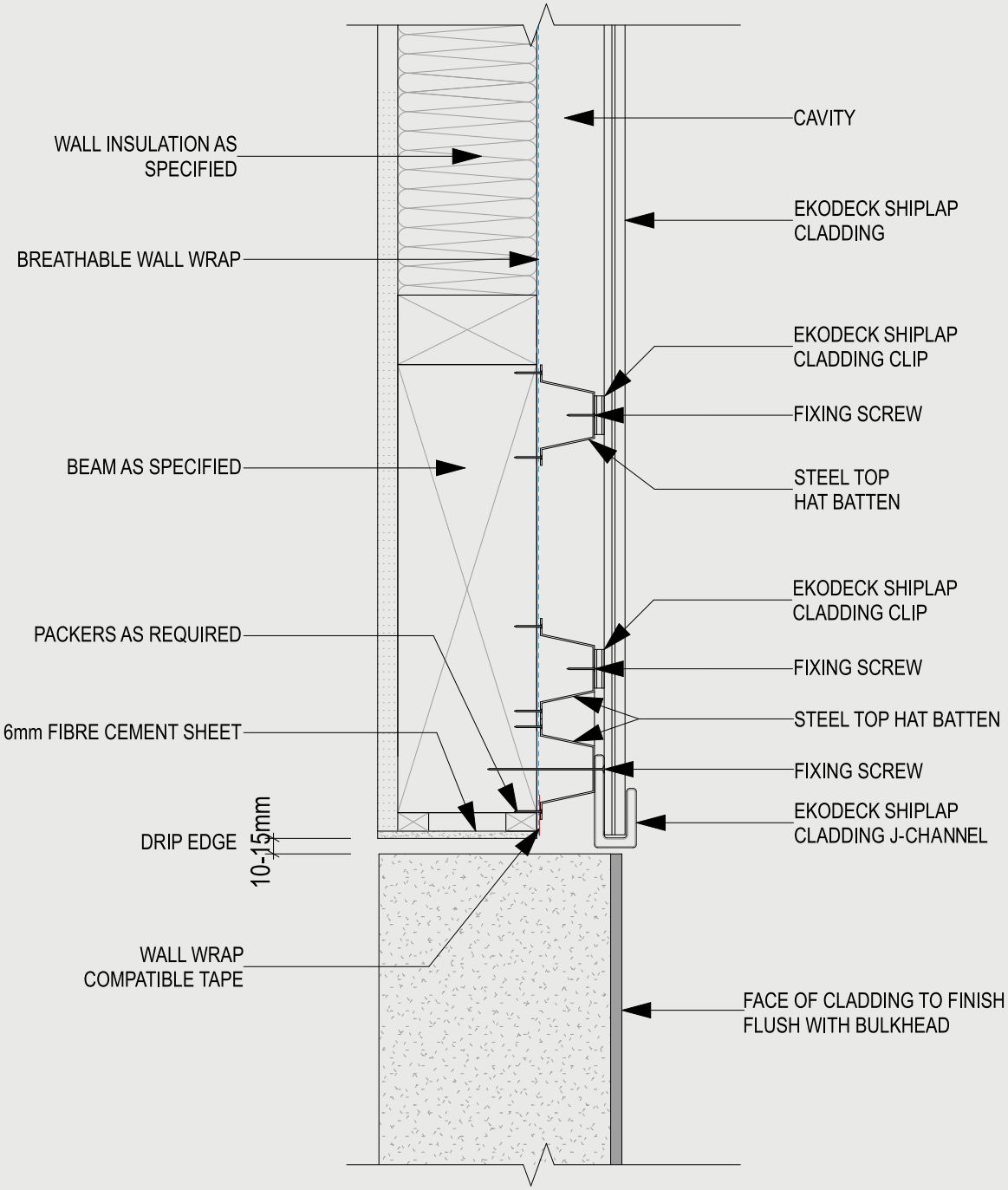


NOTE:
LEAVE 5mm GAP BETWEEN EKODECK SHIPLAP AND J-CHANNEL

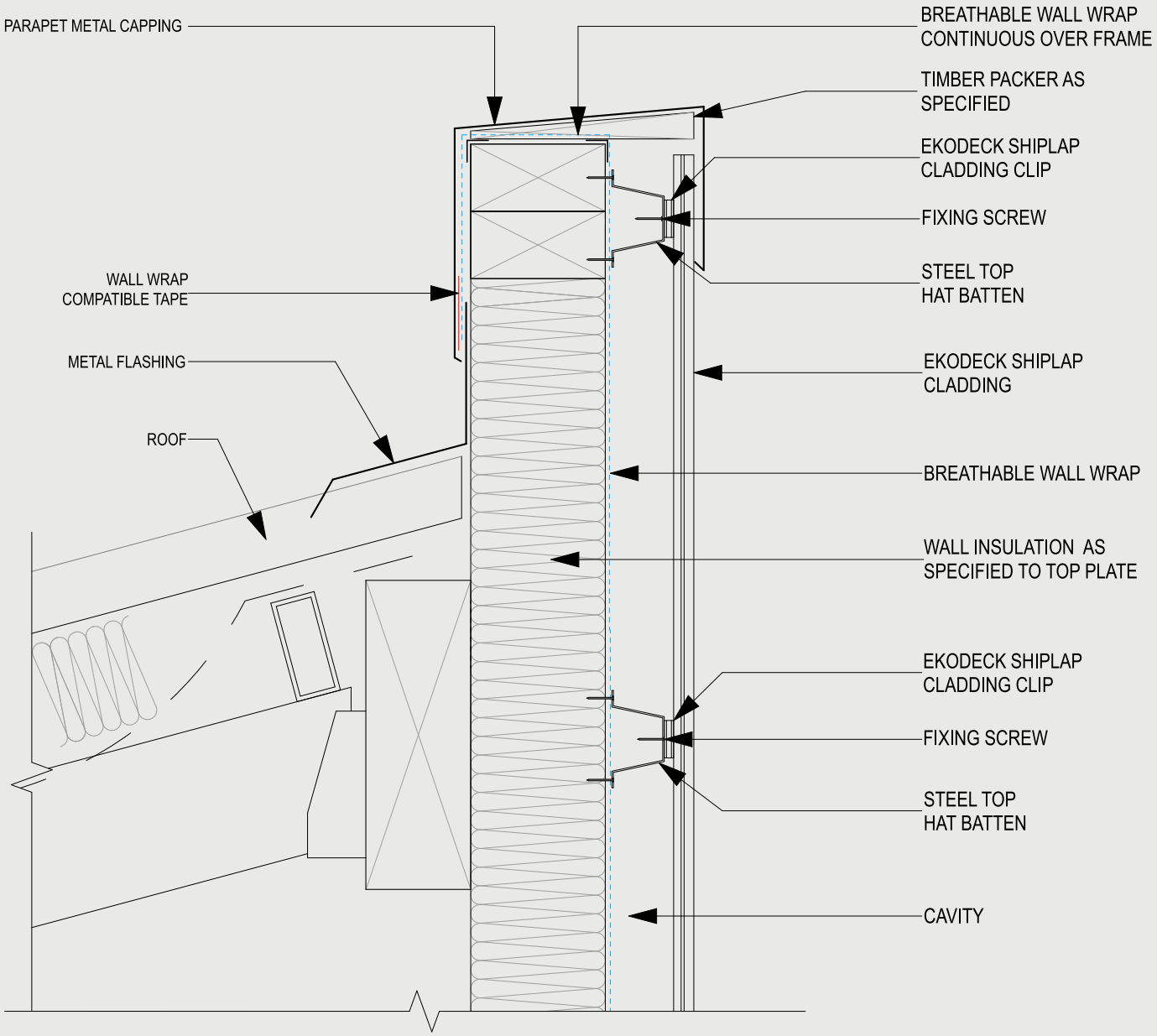
EKODECK	**SYSTEM NAME:** EKODECK SHIPLAP CLADDING	**DRAWING NAME:** TYPICAL EAVE SOFFIT DETAIL	**ORIENTATION** VERTICAL	**DATE** 23/5/2023
			SCALE N.T.S	**SHEET** EK-010a V3.26



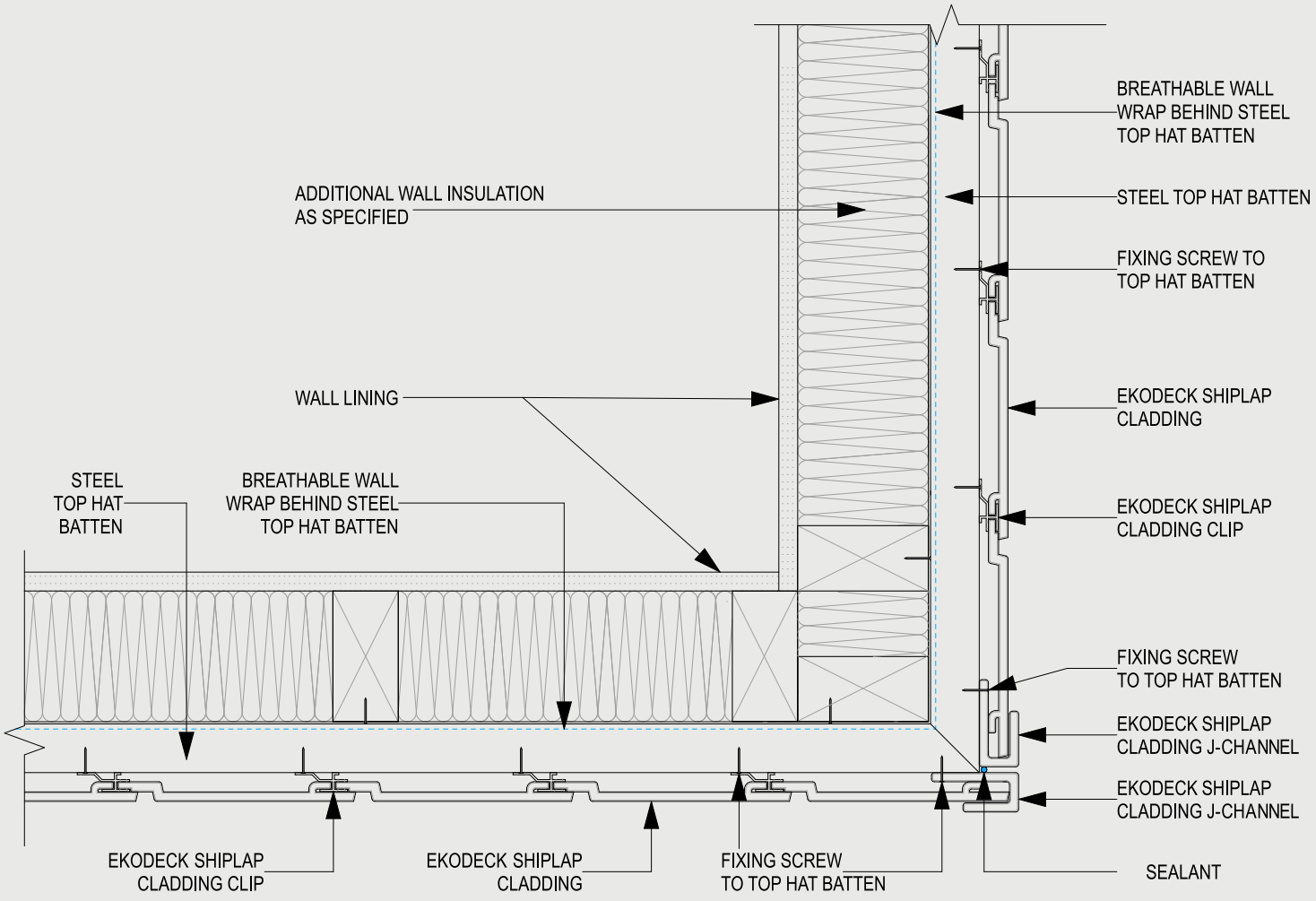
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL DOWNPIPE FIXING DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023	
			SCALE N.T.S	SHEET EK-011a	V3.26



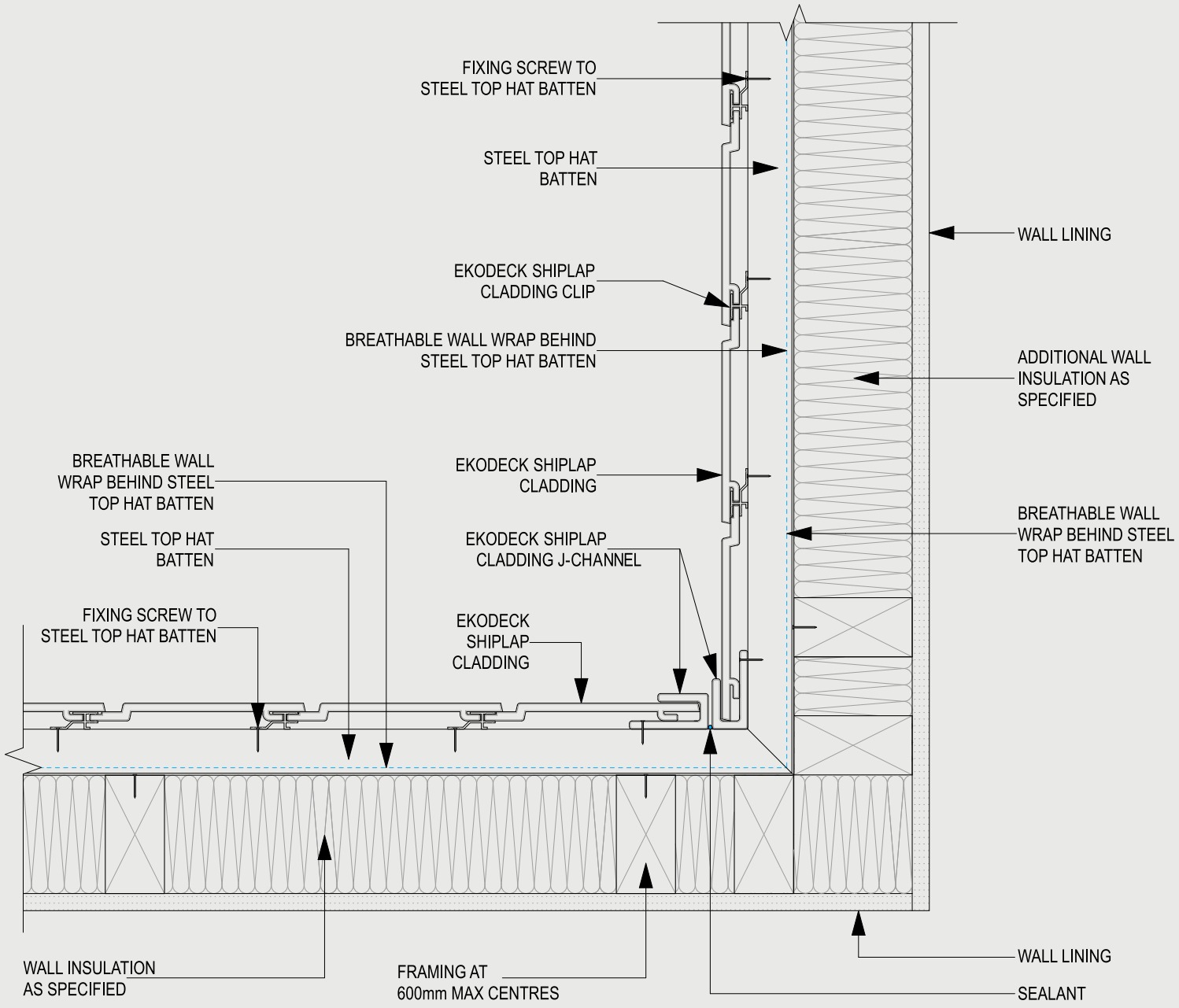
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL GARAGE / BULKHEAD / OVERHANG DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023	
			SCALE N.T.S	SHEET EK-012a	V3.26



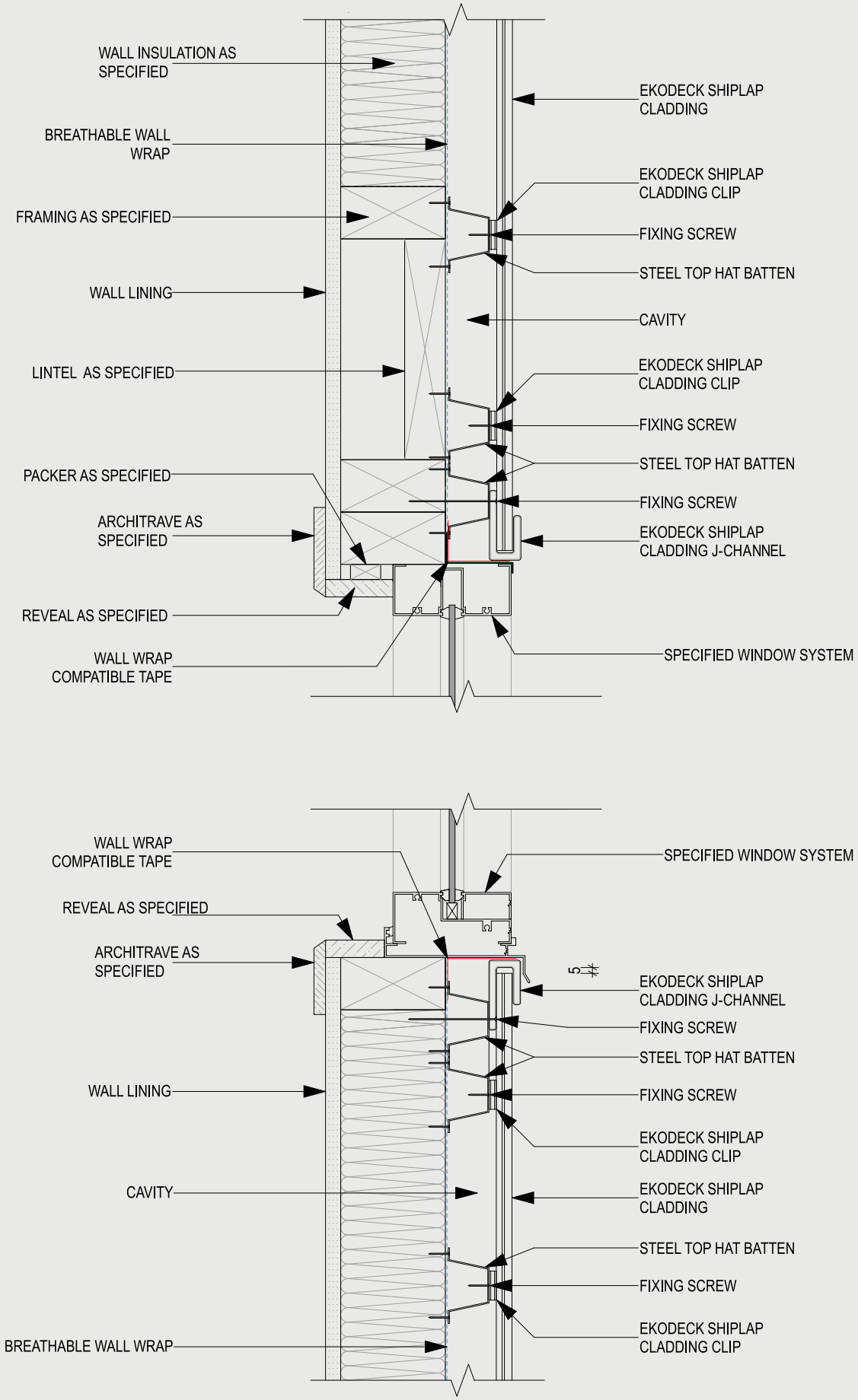
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL METAL CAPPING PARAPET WALL TO ROOF DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023	
			SCALE N.T.S	SHEET EK-013a	V3.26



EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL EXTERNAL CORNER DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023	
			SCALE N.T.S	SHEET EK-014a	V3.26

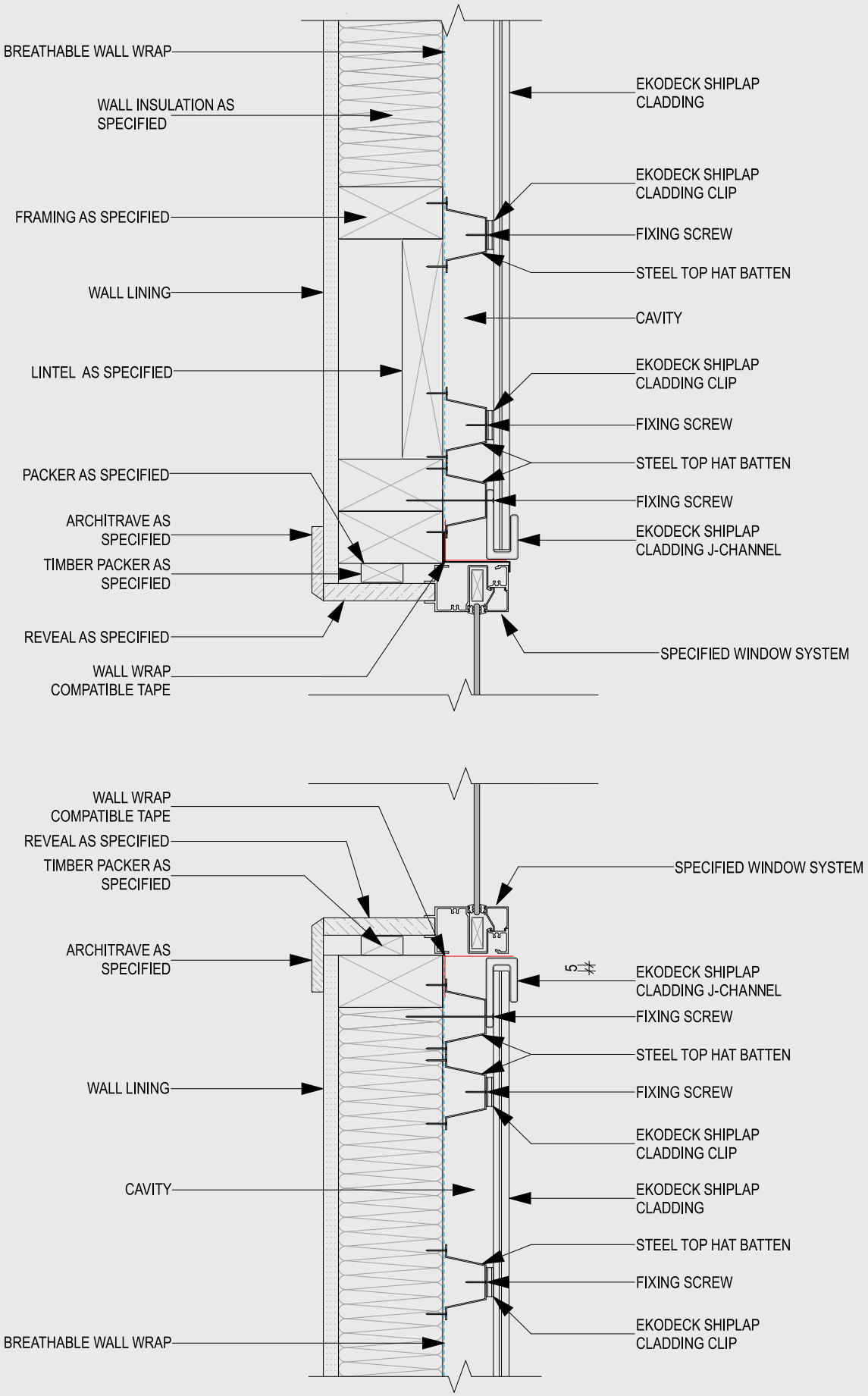


EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL INTERNAL CORNER DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023	
			SCALE N.T.S	SHEET EK-015a	V3.26

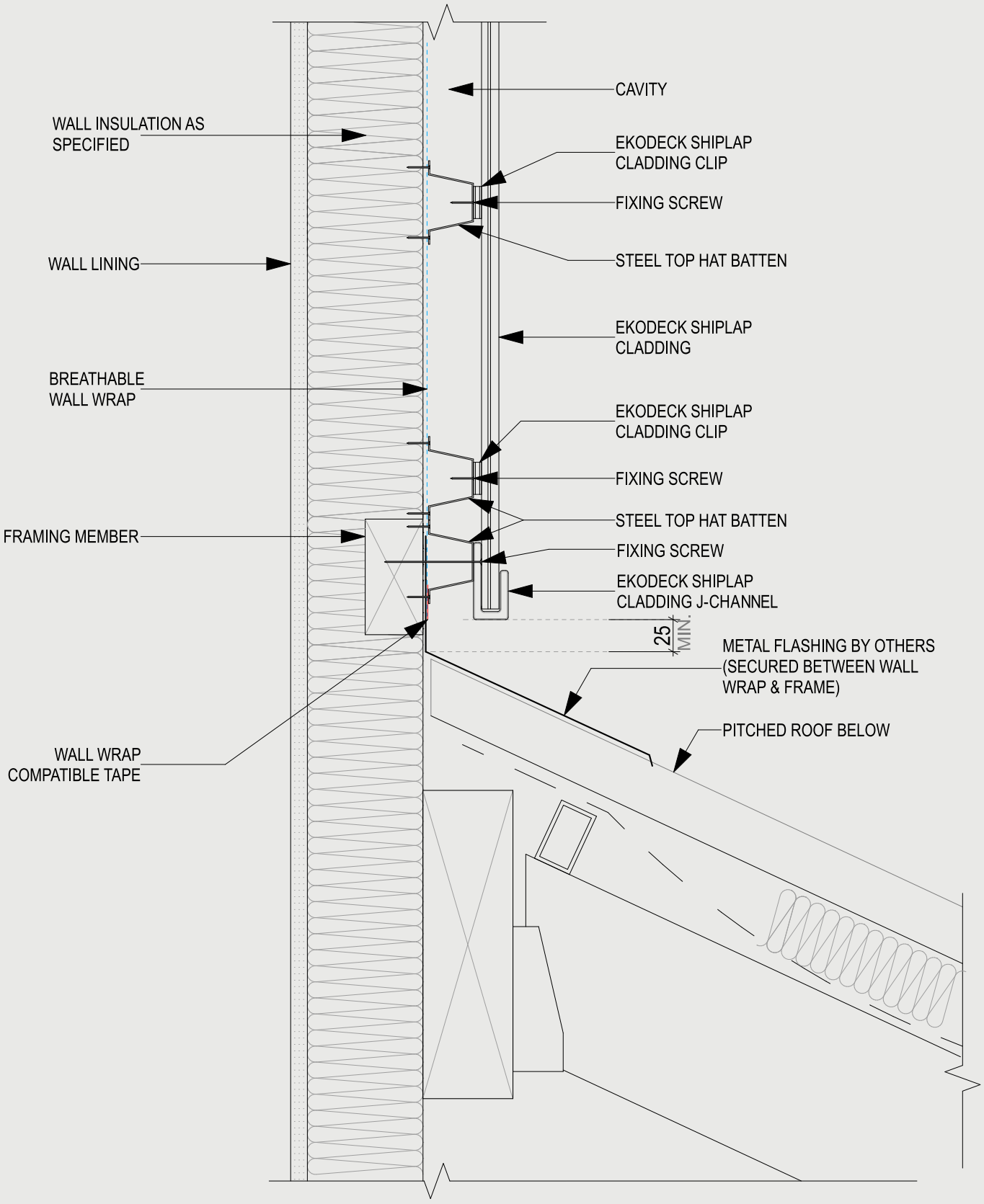


NOTE:
LEAVE 5mm GAP BETWEEN EKODECK SHIPLAP AND J-CHANNEL

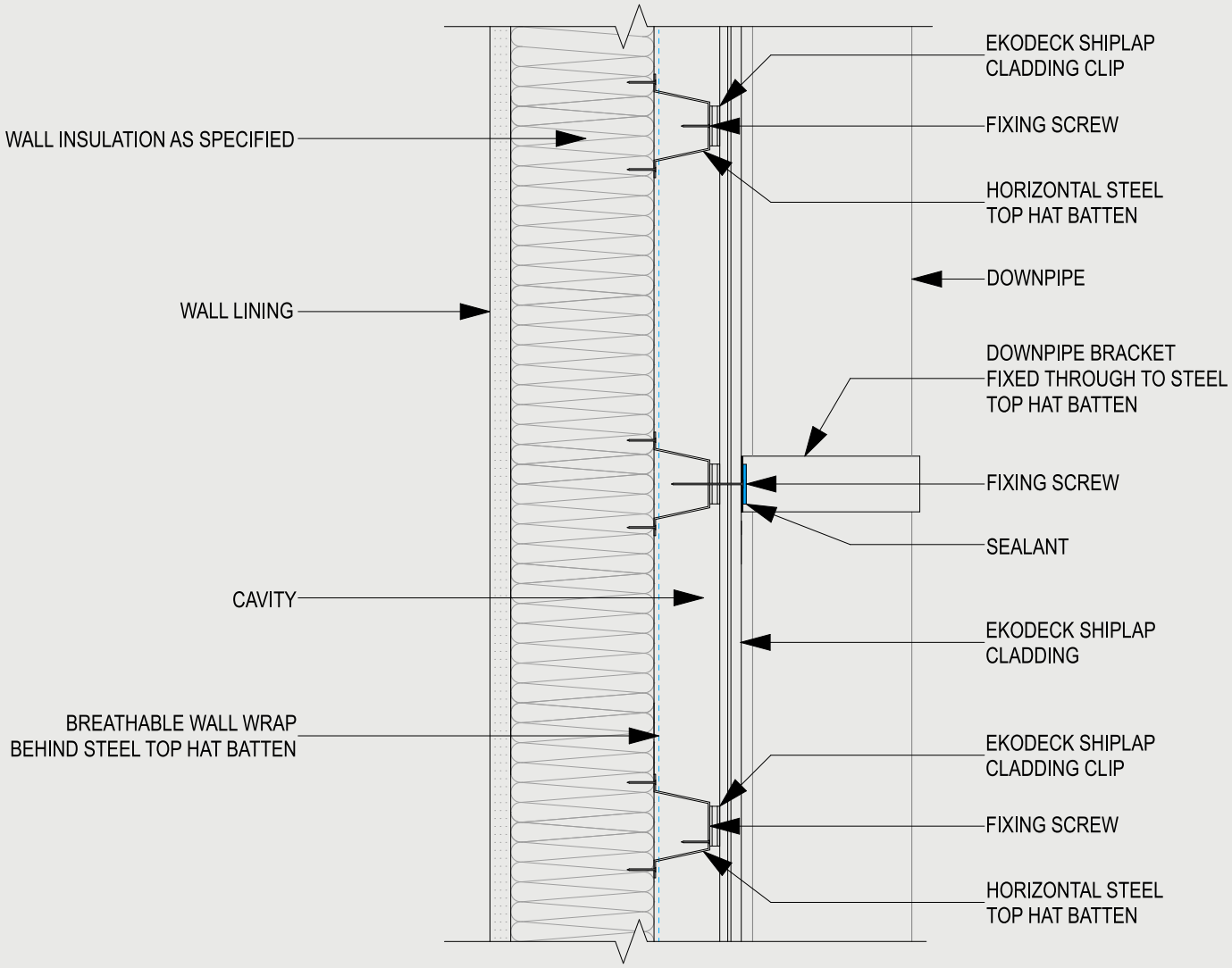
EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL WINDOW HEAD AND SILL DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023
			SCALE N.T.S	SHEET EK-016a V3.26



EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL WINDOW HEAD AND SILL DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023	
			SCALE N.T.S	SHEET EK-016ax	V3.26



EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL WALL OVER ROOF DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023	
			SCALE N.T.S	SHEET EK-017a	V3.26



EKODECK	SYSTEM NAME: EKODECK SHIPLAP CLADDING	DRAWING NAME: TYPICAL DOWNPIPE FIXING DETAIL	ORIENTATION VERTICAL	DATE 23/5/2023	
			SCALE N.T.S	SHEET EK-018a	V3.26

Ekodeck® Cladding / Shiplap

TECHNICAL SPECIFICATIONS

TEST	STANDARD	RESULT
CodeMark Certification	-	CM40387
Weight	-	8.0kg per 5.4m length / 1.48kg/m / 9.03kgm²
Water Absorption	AS/NZS 4266.1:2017	Mean: 0% Max: 0%
Burning Characteristics	AS/NZS 1530.3:1999	Ignition Time (mins.): NI Flame propagation time (s): NA Heat release integral (Kj/m²): NA Smoke release (Ig D): -0.4756 Ignitability Index (0-20): 0 Spread of Flame Index (0-10): 0 Heat Evolved Index (0-10): 0 Smoke Developed Index (0-10): 7
UV Resistance	ISO 4892-3-2016 Part 3, Cycle 1	2000h, Grey Level = 4-5
Luminance Reflectance Value (LRV)	AS 1428.1-2009 Appendix B (also compliant with AS/NZS 1428.4.1-2009)	**Carbon**: In Dry: 8.84; In Wet: 7.59 **Hazelwood**: In Dry: 11.30; In Wet: 10.86 **Lighthouse**: In Dry: 66.57; In Wet: 66.64

Ekodeck® Cladding / Shiplap

CARE & MAINTENANCE

Overview

Ekodeck® Shiplap Cladding is not a self cleaning product and will need to be washed down periodically as required.

Ekodeck® Shiplap Cladding performs best when exposed to the elements. Rain and UV generally degrade and wash away most stains naturally.

The amount of cleaning depends on what you consider to be acceptable.

Ekodeck® Shiplap Cladding is an outdoor product and like any external product, the level of cleaning depends on the surrounding environment and your level of tolerance to dirt.

This guide will give you some basic principles that will help you maintain the natural beauty of your Ekodeck® Shiplap Cladding.

General Clean

A **General Clean** is essential immediately after installation to remove any surface debris from installation and periodically as you see fit:

1. Wash the cladding with warm water and dishwashing liquid using a soft-bristled brush.
2. Rinse your cladding off with a garden hose.

We recommend a **General Clean** is performed at least annually.

Do not pressure wash your Ekodeck® Shiplap Cladding as this may cause irreparable damage.

EKODECK SHIPLAP CLADDING WARRANTY

MANUFACTURER'S WARRANTY (WARRANTY AGAINST DEFECTS)

1. AUSTRALIAN CONSUMER LAW (IF APPLICABLE)

1.1. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

1.2. We offer this warranty in addition to your other legal rights and remedies. This warranty does not exclude, restrict or modify any condition, warranty, right or remedy implied by law, including the Australian Consumer Law which cannot be excluded, restricted or modified.

2. DEFINITIONS

2.1. The following terms have the following corresponding meaning:

"Application" means either Commercial Application or Residential Application, as applicable.

"Australian Consumer Law" means Schedule 2 to the *Competition and Consumer Act 2010 (Cth).*

"Authorised Purpose" includes, as determined by Ekodeck in their sole discretion, the following:

(a) installation of the Product in accordance with the applicable Ekodeck Installation Guide: and or

(b) use of the Product in a Residential Application or a Commercial Application; and or

(c) compliance with Ekodeck's Care & Maintenance Guide.

"Care & Maintenance Guide" means the care & maintenance procedures published by Ekodeck on Ekodeck's website:

www.ekodeck.com.au

"Commercial Application" shall refer to any use of the Product in a commercial enterprise and in circumstances that do not fall within the definition of a Residential Application.

"Defect" means a defect in the manufacture, or the materials or a failure of the whole or part of the Product.

"Defective Product" means a Product that suffers from a Defect.

"Ekodeck" means Ekologix Australia Pty. Ltd. ACN 133 471 619 or any trading entity of Ekodeck.

Installation Guide" means the Product installation instructions and procedures published by Ekodeck on Ekodeck's website:

www.ekodeck.com.au

"Product" means the product to which this Manufacturer's Warranty is attached when originally purchased from an authorised Ekodeck distributor.

"Purchaser" means any original end user of the Product who purchased the Product for an Authorised Purpose from an authorised Ekodeck distributor, as determined by Ekodeck.

"Residential Application" shall refer to the use of the Product at a natural person's domicile and where the Product was purchased solely for personal, domestic or household use.

"Term" means a maximum period of 25 years calculated from the date of purchase of the Product as stated on your receipt or invoice, subject to compliance with Ekodeck terms and this Warranty.

3. THE WARRANTY

3.1. This Warranty is not transferable; it applies only to the Purchaser that purchased the Product from the authorised Ekodeck distributor, as determined by Ekodeck.

3.2. Ekodeck warrants to the Purchaser that the Product when used for an Authorised Purpose:

3.2.1. is of merchantable quality;

3.2.2. is free from Defects;

3.2.3. is fit for purpose;

3.2.4. complies with legislative requirements at the time of purchase; and

3.2.5. shall not significantly split or splinter.

(Hereafter collectively referred to as the **"Warranty"**).

3.3. The Warranty commences on the date that the Purchaser purchases the Product and expires on Twenty-five (25) calendar years from the date of purchase by a Purchaser of the Product used in a Residential Application or Commercial Application.

3.3.1. Commercial Application; or

3.3.2. Residential Application; or

(Hereafter collectively referred to as the **"Warranty Period"**).

3.4. Ekodeck, acting reasonably, will determine whether the Product was used in a Residential Application or Commercial Application having regard to the Claim.

4. WARRANTY CLAIM PROCEDURE

4.1. During the Warranty Period, the Purchaser must provide written notification together with supporting documents to Ekodeck within 30 days from the Purchaser discovering the Defect (**"Notice"**).

4.2. The Notice must include:

4.2.1. details with respect to the application of the Product;

4.2.2. a clear description of the alleged Defect;

4.2.3. photographs of the alleged Defect;

4.2.4. quantity of the Product claimed to be defective; and

4.2.5. proof of original receipt (or other evidence displaying the date of purchase, with such further evidence to be to the reasonable satisfaction of Ekodeck).

(Hereafter collectively referred to as a **"Claim"**).

4.3. Upon receipt of the Claim, Ekodeck will contact the Purchaser as soon as practically possible to investigate the Claim, where Ekodeck will seek to establish the cause of the Claim.

4.4. If a Defect is found, Ekodeck may, at its sole discretion, repair the Defective Product, supply new or like-for-like board, parts or components to replace the Defective Product (or part thereof). If an identical part or component is not available, Ekodeck may repair or supply parts and components of similar quality, grade, and composition. The provision of replacement boards relates only to the supply of product and does not include any costs associated with removal, disposal, or installation.

4.5. In addition to the rights of Ekodeck in clause 4.4 of this Warranty, Ekodeck may, at its sole discretion, elect to refund all or part of the purchase price paid by Purchaser for the Defective Product.

5. LIMITATIONS AND EXCLUSIONS TO WARRANTY

5.1. Where a Defect arises due to mould or mildew, the Warranty Period is limited to two (2) years from the Date of Purchase, irrespective of any other provision in this Warranty.

5.2. This warranty does not cover installation and or use of the Product for any purpose that is not an Authorised Purpose.

5.3. For the purpose of this Warranty, the following matters are excluded from the definition of a Defect:

5.3.1. improper installation, maintenance or handling of the Product and/or failure to abide by Ekodeck's installation or maintenance guidelines;

5.3.2. use of the Product in an application not recommended by Ekodeck's guidelines and applicable codes or standards;

5.3.3. movement, distortion, collapse or settling of the the supporting structure on which the Product is installed;

5.3.4. any act of God (including flooding, earthquake, lightning and any other naturally occurring environmental or other disaster);

5.3.5. staining from foreign substances (including mould, mildew, dirt, grease, oil and any other substance);

5.3.6. improper storage, abuse or neglect of the Product by Purchaser;

5.3.7. overloading;

5.3.8. ordinary wear and tear (including natural occurring change of colour associated with time and or exposure to natural elements);

5.3.9. minor splits or cracking around screws;

5.3.10. any natural colour variance in the Product.

5.3.11. any cutting of the Product that compromises the structural integrity of the Product; or

5.3.12. using the Product beyond the capabilities associated with the applicable Australian Standard

5.4. This Warranty does not extend to cover:

5.4.1. costs associated to remove any Defective Product from the Purchaser's premises, or the location of the Product;

5.4.2. any charges incurred by the Purchaser in returning any defective product to Ekodeck or in notifying Ekodeck of the alleged defective product;

5.4.3. costs associated with installing any replacement product;

5.4.4. costs associated with making a claim under this Warranty, including costs such as postage and handling; and

5.4.5. any other reasonably foreseeable costs incurred.

5.5. Ekodeck board dimensions and colour are subject to normal manufacturing variations and tolerances. Reasonable variances, as determined by Ekodeck, in Product dimensions and colour are not considered a defect under this Warranty and are specifically excluded. Due care should be taken when installing Ekodeck Products to allow for such variance.

5.6. The maximum value of any Claim of any one claim or total of all claims made by a Purchaser with respect to the purchase of the Products is limited to the dollar equivalent of the percentages referred to in the below table:

Maximum Value of all or any Claim Amount	Claim Period - Any Application
100%	From date of Purchase to end of the 15th year*
90%	To the end of the 16th year
80%	To the end of the 17th year
70%	To the end of the 18th year
60%	To the end of the 19th year
50%	To the end of the 20th year
40%	To the end of the 21st year
30%	To the end of the 22nd year
20%	To the end of the 23rd year
10%	To the end of the 24th year
5%	To the end of the 25th year

* If the Product was purchased on the 1st of July 2025, the 0-15 years Claim Period would run from 1 July 2025 to 30 June 2040.

6. GENERAL CONDITIONS

6.1. Ekodeck or any of its affiliated employees or agents will not be liable for any direct, indirect, special or consequential loss or damage arising out of the use of, or handling of any Ekodeck Product whatsoever, including any direct, indirect, special or consequential loss or damage suffered as a result of the negligence of Ekodeck, except those which cannot be excluded by law.

7. SEVERABILITY

7.1. If any term of this Warranty is held to be illegal, void or unenforceable in a jurisdiction, then:

7.1.1. where the term can be read down so as to give it a valid and enforceable operation of a partial nature, it must be read down to the extent necessary to achieve that result, and

7.1.2. in any other case the term must be severed from this Warranty for that jurisdiction in which event the remaining terms operate as if the severed provision had not been included.

8. CONTACT INFORMATION

8.1. Ekodeck can be contacted at:

Business address: Unit 6, 11 Sabre Drive,
Port Melbourne, Victoria, Australia 3207

Phone: 1300 867 917

Email: info@ekodeck.com.au