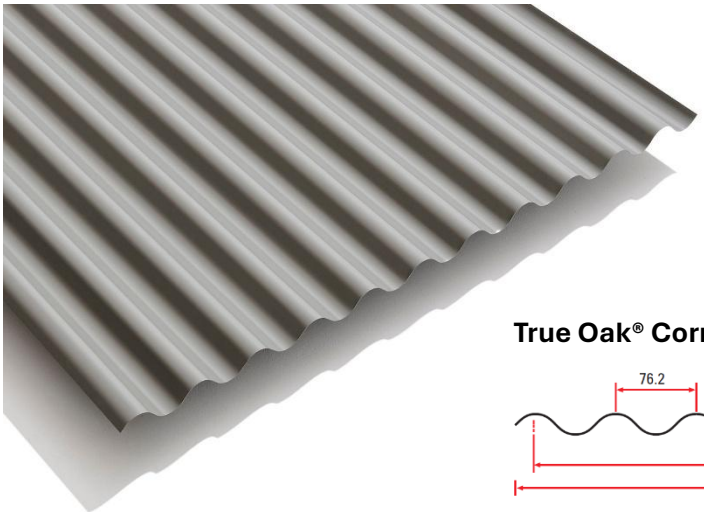
PRODUCT TECHNICAL STATEMENT

TRUE OAK®

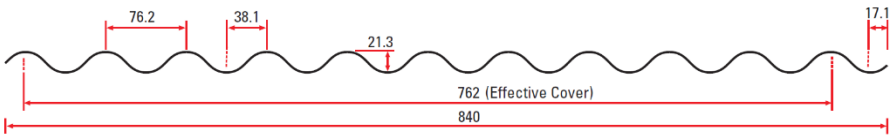
A return to the original corrugate



True Oak® Side Lap

All dimensions are nominal, in mm. Sheet cover width tolerance +/-5mm.

True Oak® Corrugate



DESCRIPTION

True Oak® Corrugate (True Oak®) is a return to the original, deeper, rounder sinusoidal corrugate profile, reimagining the heritage of corrugate. Strikingly different from shallow corrugated profiles, True Oak® adds style and a classic aesthetic to any roofline. The distinctive rib lines and deeper curves provide a striking shadow as well as transforming the performance of corrugated roofing.

Exclusive to Roofing Industries and with national coverage, True Oak® provides numerous benefits to building designers over traditional corrugated profiles, supported by extensive load testing. True Oak® can also be utilised as an integral component in RoofLogic® insulated warm roof systems.

FEATURES

- Deeper and rounder sinusoidal ribs give a more expressed rib shape with distinctive lines providing a unique aesthetic, similar to the corrugate of old.
- The unique shape of True Oak® allows,
    - Increased strength
    - Lower risk of foot traffic damage
    - Better water carrying capacity
    - A lower roof pitch down to 4 degrees
- Where used in wall cladding applications, True Oak® can also be used in both horizontal and vertical applications.
- Innovative profile design, supported by wind and concentrated load/span data and recommended fastener patterns derived from load testing using industry test-rig apparatus in accordance with the NZ Metal Roofing Manufacturers (MRM) test procedure.
- Suitable for residential and commercial projects, in roofing and wall cladding applications.
- Matching accessories are available including natural lighting, flashings, fasteners, underlays and EZI-FLO™ guttering and downpipe systems.

Manufacturing Locations: Auckland, Taupō, Hawke's Bay, Palmerston North and Christchurch

MINIMUM PITCH

The minimum roof pitch for True Oak® is 4 degrees (approx. 1:14).

Designers should consider increasing the roof pitch above minimum to consider the cumulative effect of deflections from framing, purlins and roof sheeting or penetrations, and potential for building movement over time.

For curved roofing, the roof cladding must not terminate at a pitch lower than permitted above. Side laps of curved sheets must be sealed on any areas below the minimum pitch permitted above.

An eaves gutter flashing is recommended where True Oak® is used below 10 degrees pitch, and as required by E2/AS1 and the MRM Roof and Wall Cladding Code of Practice (MRM COP).

SHEET LENGTHS

Custom-made cut to length sheets can be manufactured, subject to transport and site limitations. As sheet lengths increase higher transportation costs may be applicable, and sheet lengths over 28 metres require specialised transportation.

For aluminium substrate, maximum recommended sheet lengths are 10-12 metres for dark colours and 12-15 metres for plain and light colours. Refer to the Thermal Movement Provisions section.

Contact Roofing Industries for specific project advice regarding sheet lengths and transport requirements.

COATINGS

Selecting the right substrate is dependent on the environment in which the project is situated. True Oak® is available in the following Pacific Coilcoaters and New Zealand Steel materials, along with the full range of ColorCote® and COLORSTEEL® colours.

Steel Substrate

Base Metal Thickness (BMT): 0.40mm & 0.55mm

- ColorCote® ZinaCore™
- ColorCote® MagnaFlow™
- COLORSTEEL® Maxam®

Aluminium Substrate

Base Metal Thickness (BMT): 0.90mm

- ColorCote® AlumiGard™
- COLORSTEEL® Altimate®

Refer to Pacific Coil Coaters and New Zealand Steel literature for environmental zones, coating systems and warranty information.

Material is subject to availability and materials such as copper, titanium zinc, etc. may have longer lead times. Contact Roofing Industries for specific advice.

INFORMATION TABLE

Substrate Material	Steel*		Aluminium
Base Metal Thickness, BMT (mm)	0.40	0.55	0.90
Weight per lineal metre (kg/m)	3.37	4.50	2.50
Maximum Sheet Overhang[1] (mm)	150	150	150
Drape Curved Roofs			
Minimum Radius (m)	25	18	18
Maximum Radius (m)	60	60	60
Purlin Spacings for Drape Curved Roofs			
Maximum Intermediate Spans (mm)	1200	1400	1200
Maximum End Spans (mm)	800	900	800
Pre-curved Roofs			
Minimum Radius (m)	N/R	300	300
Recommended Minimum Radius (m)	N/R	400	400

N/R = Not Recommended *Based on 150g/m² alloy coating All weights are approximate

[1]From last fixing line to sheet end: Not suitable for roof access without additional support.

FIRE TESTING

Refer to Pacific Coil Coaters and New Zealand Steel bulletins for fire testing of ColorCote® and COLORSTEEL® products, which can be supplied on request.

SPECIFICATION

Refer to Roofing Industries full specification statements on Masterspec and/or Smartspec, www.roof.co.nz and our Selection Guide.

SOLAR INSTALLATIONS

Rib fixed solar panels can be used with True Oak®. These are required to be specifically designed and installed to solar manufacturers recommendations.

For further information, refer to the MRM COP, Pacific Coil Coaters and New Zealand Steel bulletins for the use of solar installations with ColorCote® and COLORSTEEL® products.

BUILDING DESIGN / PERFORMANCE CRITERIA / PRODUCT SELECTION

During the design phase, it is necessary for the designer to consider a number of factors when specifying True Oak®:

- Material type and finish
- Roof Pitch
- Sheet lengths
- Wind loadings
- Load span performance (Refer to the Load Span Graphs section)
- Reference to Roofing Industries detail drawings
- Purlin and nogg/girt spacing

Underlay as per the project specifications should be used to meet NZS 2295 and/or AS/NZS 4200 standards, in accordance with the underlay manufacturers recommendations. Where the roof pitch is 10 degrees and above, self-supporting underlay is recommended (without any support) and purlin spacings must be limited to a maximum of 1.2m centres for vertically run underlay and 1.05m centres for horizontally run underlay. Where the roof pitch is less than 10 degrees, underlay must be fully supported with a corrosion resistant material.

For buildings designed in accordance with E2/AS1 and cladding products covered by that document are chosen, the design spans are required to comply with E2/AS1. However, where a building is outside of the scope of E2/AS1, the building and parts thereof require specific design by a suitably qualified structural engineer and the roofing and cladding design spans (purlin and nogg/girt spacing) are required to be suitable for that design.

Whilst aesthetics and product availability do play a part, the chosen profile must meet certain performance criteria. These are centred around the ability of the product to span between purlin and nogg/girt spacings and meet the design criteria.

Where an aluminium substrate is used, steel netting cannot be used where it may be in contact (either directly or through underlay degradation) with the aluminium roofing or cladding. Alternative materials such as plastic strapping are to be used where support is required, or the cladding separated from the underlay by a high-density plastic batten, drainage matt or similar, and the use of an aluminium gutter flashing. This is also applicable to coated metal and zinc roofing in severe marine applications. In all cases self-supporting paper should be used, including when support is required. Refer to section 14.19 of the MRM COP.

Green (or wet) timber contracts as it dries, resulting in shrinkage. Only install into timber when the moisture content is 18% or less (i.e. the maximum moisture content as specified in NZS 3604 and the MRM COP). True Oak® must be isolated when laid directly on timber battens, plywood or other incompatible materials using a suitable isolator in-between.

All fixings and fasteners are to be of an approved type, compatible with all materials, the environment and must meet the requirements of the NZ Building Code. Refer to E2/AS1 and the MRM COP. Installation is to be in accordance with the MRM COP and manufacturers literature.

True Oak® is an alternative solution to E2/AS1 and is to be designed and installed to manufacturer's recommendations.

PURLIN/GIRT SPACING LIMITATIONS AND RECOMMENDATIONS

E2/AS1 states that a specific design may produce a more optimum spacing for fixing than as presented in this document. For True Oak® this is particularly applicable, and the manufacturer's information should be used. Manufacturers' recommendations for maximum spacings are as determined by testing carried out to methodology in the MRM COP.

For most roof installations purlin spacings will be determined by the trafficable or wind load criteria whichever is the lower limiting factor. However, for roofs that are not able to be walked on (non-trafficable) and for wall cladding applications, these limitations may be exceeded providing the design wind loading criteria is met. However, caution is recommended as additional secondary fasteners may be required in the profile side laps.

The designer should consider reducing purlin spacings accordingly in areas of heavy roof traffic, snow loadings or where the roofing supports plant items such as air conditioning units. For curved roofing limitations, refer to the Information Table.

For buildings within the scope of NZS 3604 using, a.) cavity construction, a maximum batten spacing of 800mm is recommended to balance aesthetics and practicality, or b.) direct fixed vertical sheeting, using E2/AS1 as guidance for direct fixed profiles, a maximum nogg/girt spacing of 480mm is required to comply with E2/AS1 Clause 9.1.1.5. However, the Uniform Load Span Graphs must also be checked for the given Wind Zone and nogg/girt spacing. For buildings outside the scope of NZS 3604 (unlined warehouses, sheds etc.), refer to the Uniform Load Span Graphs section.

True Oak® sheets must be fixed into **all** purlins and girts (and all noggs/top/bottom plates for timber/steel framing).

WIND LOADINGS

Firstly, it is necessary for the designer to calculate the design wind load for the roofing and cladding following accepted practice, by reference to AS/NZS 1170, NZS 3604 and/or the NASH Light Steel Framed Buildings standard as appropriate. For further explanation, refer to the MRM COP.

The wind uplift and suction forces on True Oak® roofing and cladding are transferred through to the building via the fasteners into the structure. The performance criteria are the number of fasteners per square metre, which can be varied by the spacing of purlins and noggs/girts, or the number/spacing of fasteners per sheet width.

SNOW LOADINGS

When the possibility of snow exists, it is necessary for the designer to allow for the complexities of imposed snow loads including snowdrift due to wind. Snow loads for a project can vary by region and altitude, refer to the MRM COP for snow loads and the snow loadings map.

Design can be achieved by increasing the strength of the structure and/or minimising the buildup of snow (commonly increasing the roof pitch to allow ease of snow shedding). Snow loads are treated as uniformly distributed loads, similar to wind loads.

UNIFORM & CONCENTRATED LOAD SPAN GRAPHS

Loadings referred to in Roofing Industries True Oak® graphs are the result of testing to serviceability (SLS) limit state in accordance with MRM test procedures and using MRM test apparatus, utilising variations in fasteners and fixing patterns, covering both roofing and cladding applications. Refer to the MRM COP for fixing classification types.

The Design Graphs are presented in a form to allow the designer/engineer to select suitable products and maximum purlin spacings, outlining guidance for True Oak® fixing requirements for buildings within the scope of NZS 3604 and the NASH Light Steel Framed Buildings standard, up to Extra High Wind Zones. Refer also to the notes in the graphs.

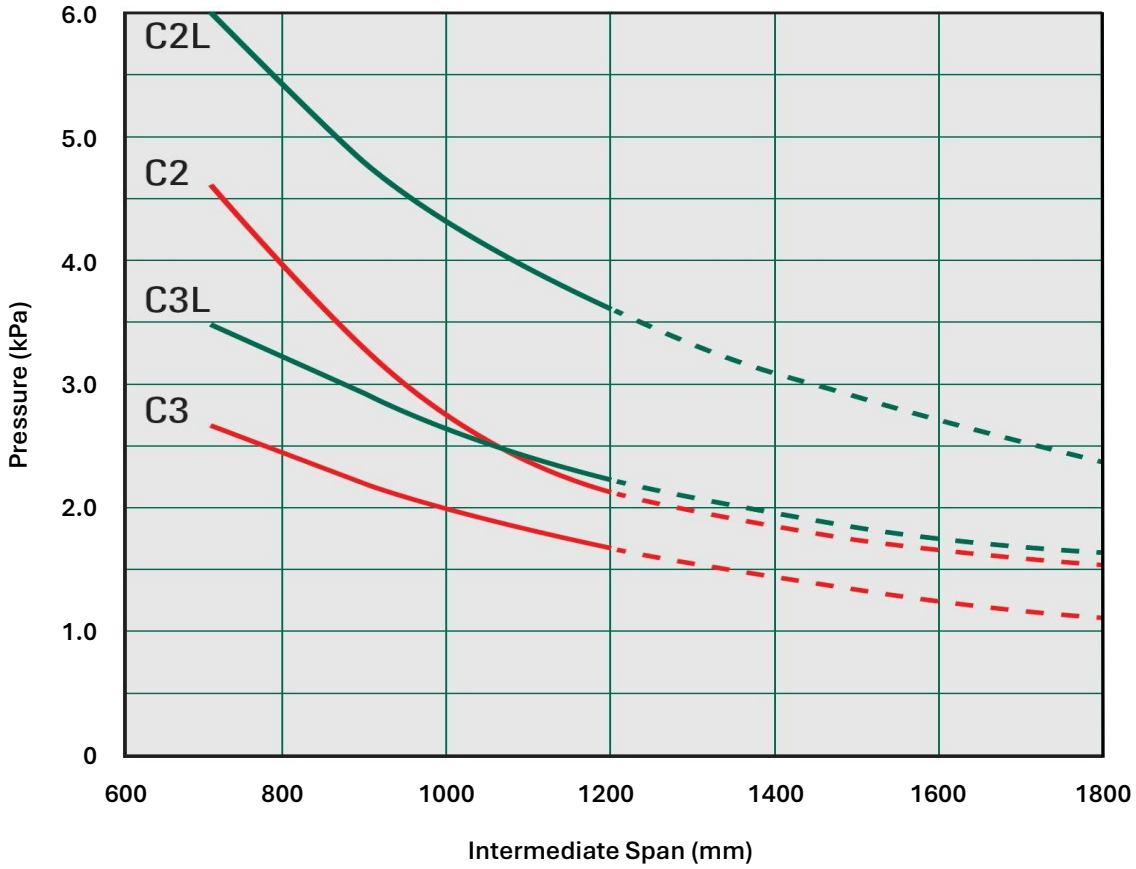
SED Wind Zones require specific design by a suitably qualified structural engineer. Fixing types, embedment, pullout, etc. need to be checked with the fastener manufacturer to ensure design loads are met.

For commercial and industrial roofing applications, 0.55mm BMT steel or 0.90mm BMT Aluminium is recommended for robustness, particularly to damage by other trades.

ROOFING APPLICATION – UNIFORM & CONCENTRATED LOAD SPAN GRAPHS

Steel-based Material G550 High Strength

True Oak® x 0.40mm Serviceability Limit State (SLS)



Notes:

- End spans to be a maximum of 2/3 of intermediate spans.
- Fixing patterns illustrated C2L, C2, C3L, and C3 in the graphs are detailed in the Roofing Application – Primary Fixing Methods section.
- Dotted lines indicate purlin spans suitable for non-trafficable roof areas and wall cladding.
- The above load span graph and maximum foot traffic spans below are applicable to steel-based substrates. For other substrates, contact Roofing Industries.

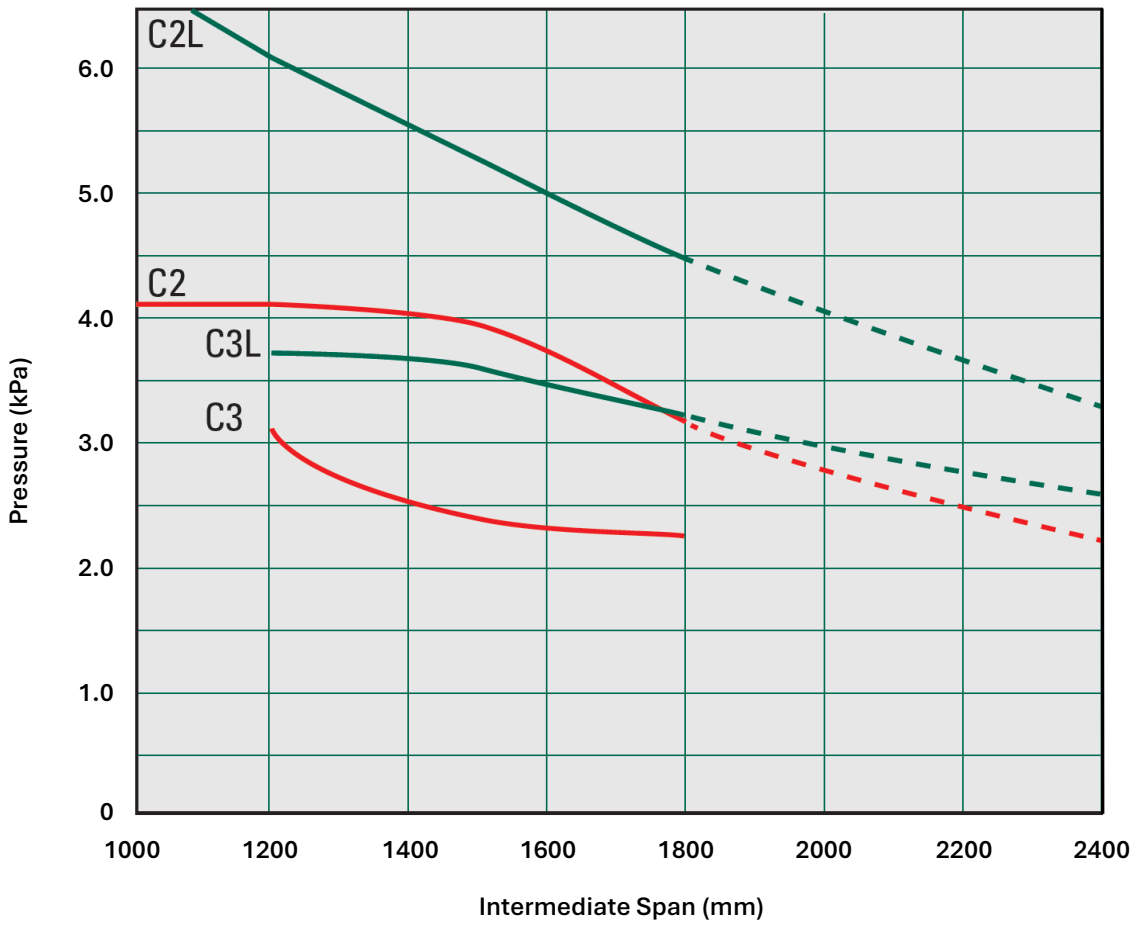
True Oak® x 0.40mm Maximum Foot Traffic Spans (mm)

Classification Type (MRM COP)	Intermediate Spans	End Spans
Unrestricted Traffic	1200	800
Non-Trafficable	1800	1200

ROOFING APPLICATION – UNIFORM & CONCENTRATED LOAD SPAN GRAPHS

Steel-based Material G550 High Strength

True Oak® x 0.55mm Serviceability Limit State (SLS)



Notes:

- End spans to be a maximum of 2/3 of intermediate spans.
- Fixing patterns illustrated C2L, C2, C3L, and C3 in the graphs are detailed in the Roofing Application – Primary Fixing Methods section.
- Dotted lines indicate purlin spans suitable for non-trafficable roof areas and wall cladding.
- The above load span graph and maximum foot traffic spans below are applicable to steel-based substrates. For other substrates, contact Roofing Industries.

True Oak® x 0.55mm Maximum Foot Traffic Spans (mm)

Classification Type (MRM COP)	Intermediate Spans	End Spans
Unrestricted Traffic	1800	1200
Non-Trafficable	2400	1600

ROOFING APPLICATION – PRIMARY FIXING METHODS

True Oak® G550 High Strength Steel

C2L Fix side laps and miss 1, hit 1, miss 2, hit 1, miss 1, hit1, miss 2, etc. with approved screws and neos, load spreading profiled metal washers and EPDM washers. End purlins and periphery of roof to be fixed every 2nd crest.

C3L Fix side laps and miss 2, hit 1, miss 3, hit 1, miss 2, etc. with approved screws and neos, load spreading profiled metal washers and EPDM washers. End purlins and periphery of roof to be fixed every 2nd crest.

C2 Fix side laps and miss 1, hit 1, miss 2, hit 1, miss 1, hit1, miss 2, etc. with approved screws and neos, and/or alloy embossed washers. End purlins and periphery of roof to be fixed every 2nd crest.

C3 Fix side laps and miss 2, hit 1, miss 3, hit 1, miss 2, etc. with approved screws and neos, and/or alloy embossed washers. End purlins and periphery of roof to be fixed every 2nd crest.

Notes:

- Other fixing patterns may be used, however these will alter the design capability and require specific design by a suitably qualified structural engineer.
- For drape curved roofing, the first two purlins at each end of the sheet should be fixed using profile metal washers and EPDM seals to every crest, with the balance of the roof fixed as above.

WALL CLADDING APPLICATION – PRIMARY FIXING METHODS

True Oak® G550 High Strength Steel

Fix in the pan adjacent to every side lap over rib and every second pan, and at all external and internal corners with approved screws and neos.

Notes:

- Other fixing patterns may be used, however these will alter the design capability and require specific design by a suitably qualified structural engineer.
- Pan fixed wall cladding can be assumed to perform to the **C2L** graph for the corresponding Base Metal Thickness shown in the Roofing Application – Load Span Graphs section.

PRIMARY FIXING CHART

Roofing - Crest fixed

	Timber Purlins	Steel Purlins up to 1.5mm	Steel Purlins 1.5mm-4.5mm	Washers (When required)
Steel-based Material	12-11x55 Class 5 Timber screws with neos, or M6x55 Timber screws with neos	12-14x45 Class 5 Steel screws with neos, or M6x55 Timber screws with neos	12-14x45 Class 5 Steel screws with neos	True Oak® load spreading profile Steel washer & 30mm EPDM
Aluminium-based Material	14-10x73 Aluminium screws with neos through a 10mm dia. clearance hole with True Oak® load spreading profile Ali washer & 30mm EPDM	Stainless steel grade 304, 14-14x70 Steel screws with neos through a 10mm dia. clearance hole with True Oak® load spreading profile Ali washer & 30mm EPDM	Stainless steel grade 304, 14-14x70 Steel screws with neos through a 10mm dia. clearance hole with True Oak® load spreading profile Ali washer & 30mm EPDM	True Oak® load spreading profile Ali washer & 30mm EPDM

Wall Cladding - Pan fixed

	Timber Noggs	Steel Girts up to 1.5mm	Steel Girts 1.5mm-4.5mm	Washers (When required)
Steel-based Material Direct Fixed	12-11x40 Class 5 Timber screws with neos	12-14x20 Class 5 Steel screws with neos	12-14x20 Class 5 Steel screws with neos	
Steel-based Material 20mm Cavity	12-11x55 Class 5 Timber screws with neos, or M6x55 Timber screws with neos	12-14x45 Class 5 Steel screws with neos, or M6x55 Timber screws with neos	12-14x45 Class 5 Steel screws with neos	
Aluminium-based Material Direct Fixed	12-12x35 Aluminium screws with a 14mm Ali EPDM bonded washer, into a pre-drilled pilot hole through sheeting and into timber	Fixing directly into steel girts is not recommended. Use 12-12x35 Aluminium screws with a 14mm Ali EPDM bonded washer, into a pre-drilled pilot hole through sheeting and fixed into timber strapping (structural 45mm deep strapping, fixed into steel girts to engineer's design)		14mm Ali EPDM bonded washer
Aluminium-based Material 20mm Cavity	14-10x55 Aluminium screws with a 14mm Ali EPDM bonded washer, into a pre-drilled pilot hole through sheeting and into timber	Fixing directly into steel girts is not recommended. Use 12-12x35 Aluminium screws with a 14mm Ali EPDM bonded washer, into a pre-drilled pilot hole through sheeting and fixed into timber battens (structural castellated 45mm deep battens, fixed into steel girts to engineer's design)		14mm Ali EPDM bonded washer

Notes:

- Primary fixing requirements are for buildings within the scope of NZS 3604 for up to Extra High Wind Zones.
- Primary fasteners are to have a minimum 30mm embedment into structural timber purlins, battens or timber framing; or minimum 3 threads showing from the underside of steel purlins/girts; adjusting fastener length where using non-structural battens, load spreading profile washers, etc. to account for the extra thickness of components.
- Where load spreading profile washers are used to fix roofing sheets, 25mm aluminium embossed washers and an appropriate screw fixing regime must also be used to fix all ridging, roof flashings, etc.
- Where 14mm aluminium EPDM bonded washers are used to fix wall cladding sheets, the same washers and an appropriate screw fixing regime must also be used to fix flashings, etc.
- Class 5 (Category 5) fasteners are to be used with steel-based material in all environments.
- To be read in conjunction with Thermal Movement Provisions, Load Span Graphs and Primary Fixing Methods.
- Secondary fasteners are to be used in accordance with the MRM COP.

FRAME TOLERANCE

It is important that the structure is suitable for the installation of metal roofing and wall cladding.

Particular attention should be paid to the squareness of the structure and alignment of the purlins, noggs/girts and framing, which is required to be within acceptable tolerance.

Prior to installation, the installer is to consider sheeting set out, for example to accommodate roof and wall penetrations, roof lights, windows and doors.

For timber framed construction, during installation the installer must check alignment of the framing using a string line or straight edge, particularly around penetrations to ensure the framing is plumb and true. Where sheets are cut, for example to accommodate corners and around penetrations, etc. they require packers to support the flashings. True Oak® laid directly onto framing or cavity battens requires alignment of the noggs/battens to be within +/- 5mm tolerance to mitigate batten creasing (tighter tolerance may be required for aesthetic finishes).

TRANSLUCENT ROOFING

Where natural lighting is a feature, translucent True Oak® is available as roof and wall lighting and can be supplied in either single or multi-skin forms. For further information, contact the following suppliers who manufacture a full range of fibreglass and polycarbonate products:

- Alsynite One alsynite.co.nz
- Ampelite New Zealand ampelite.co.nz

STRIPPABLE FILM

True Oak® can be supplied with strippable film to give temporary protection from scratching etc. Strippable film should be removed from underlaps while laying and removed entirely before UV sets the adhesive, making it difficult to remove without leaving glue residue on the sheet. Traffic across sheets should be kept to a minimum, particularly with self-supporting products.

THERMAL MOVEMENT PROVISIONS

All metal roofing/cladding and flashings are subject to expansion and contraction caused by changes in temperature, and their design should allow for this movement. The energy produced should be absorbed without damage to the cladding, fixings or structure. Refer to www.roof.co.nz for recommendations for damage prevention and potential noise or waviness issues.

Noise resulting from thermal expansion and contraction of the Eurostyle® spanlok® sheeting may be observed. This is a naturally occurring process and is normal to expect. Refer to Section 12.1.3 of the MRM COP and MBIE Guide to Tolerances, Materials and Workmanship 2015.

Where long length True Oak® sheets are used, thermal expansion/contraction must be considered. Aluminium is more sensitive to movement with temperature, with around twice the thermal movement of steel. Darker colours also expand/contract more than light colours.

Sheeting is fixed with the recommended fasteners and systems from the Primary Fixing Chart using the Primary Fixing Methods, and in addition allow for thermal movement in the following tables for steel and aluminium based materials where applicable.

Where sheet lengths are in excess of those shown in the tables, a step joint or other special provision for expansion is required. Contact Roofing Industries for guidance.

Steel-based Material				
E2/AS1 Compliance				
Sheet Lengths	**Up to 8m**	**8m – 12m**	**12m – 18m**	**> 18m**
	No Special Provision	Lower 50% of the roof to be fixed using oversized holes at fixing locations with approved load spreading profile washers & 30mm EPDM seals.		Not Applicable
MRM COP Compliance				
Sheet Lengths	**Up to 15m**	**15m – 18m**	**18m – 25m**	**25m – 30m**
Zincalume & Light Colours	No Special Provision		Solid fix from the ridge down 12m & use oversized holes for the remainder of the sheet with approved load spreading profile washers & 30mm EPDM seals, or approved 25mm Ali embossed washers.	Solid fix from the ridge down 12m & use oversized holes for the remainder of the sheet with approved load spreading profile washers & 30mm EPDM seals, or approved 25mm Ali embossed washers used down the entire sheet.
Dark Colours	No Special Provision	Solid fix from the ridge down 12m & use oversized holes for the remainder of the sheet with approved load spreading profile washers & 30mm EPDM seals, or approved 25mm Ali embossed washers.		Not Recommended

Aluminium-based Material				
Sheet Lengths	**Up to 10m**	**10m – 12m**	**12m – 15m**	**> 15m**
Plain Aluminium & Light Colours in Favourable Installations (Refer MRM COP Section 4.1.6)	Fix down the entire sheet using oversized holes with approved load spreading profile Ali washers & 30mm EPDM seals.			Not Recommended
Dark Coloured Aluminium in Favourable Installations (Refer MRM COP Section 4.1.6)	Fix down the entire sheet using oversized holes with approved load spreading profile Ali washers & 30mm EPDM seals.		Not Recommended	
Plain Aluminium & Light Colours in Unfavourable Installations (Refer MRM COP Section 4.1.6)	Fix down the entire sheet using oversized holes with approved load spreading profile Ali washers & 30mm EPDM seals.			
Dark Coloured Aluminium in Unfavourable Installations (Refer MRM COP Section 4.1.6)	Fix down the entire sheet using oversized holes with approved load spreading profile Ali washers & 30mm EPDM seals.	Not Recommended		

Note: Oversize holes to be 10mm diameter with fixings located centrally in the oversize hole.

HANDLING, STORAGE AND INSTALLATION

The following points, although not exhaustive, provide practical guidance to product handling storage and installation -

- Read the pack label for important guidance and inspect packs for any damage.
- Store True Oak® packs and accessories on site using evenly spaced and supportive dunnage, clear of the ground and under cover, to keep dry.
- Product surface protected with strippable film is to be stored under cover, away from UV light.
- If packs become wet and the product is not used immediately, separate the sheets to allow air circulation and drying.
- Do not drag sheets across each other or across rough surfaces.
- Other trades should be made aware of this by the main contractor.
- Installation is to be undertaken by suitably qualified installers experienced in the type of work being carried out, in line with acceptable trade practice.
- Flashings should be notched over the ribs and all sheeting should be edge fixed.
- Refer to the True Oak® detail drawings at www.roof.co.nz

For further guidance, refer to Roofing Industries Handling and Storage Guide, E2/AS1, the MRM COP and MRM Metal Long Run Roofing and Cladding Installation Guide. Failure to install all products in accordance with industry requirements may void the warranty.

MAINTENANCE

Regular maintenance should be performed as necessary to remove dirt, salt and pollutants and extend the life of the roof cladding and accessories. Industry maintenance guides are available from www.roof.co.nz and should be considered to ensure warranty conditions are fulfilled.

BRANCHES

Branch	Address	Phone	Email
Auckland	(Head Office) 5 John Glenn Avenue, Rosedale, Auckland 0632	(09) 414 4585	auckland@roof.co.nz
Whangārei	17 Stan Semenoff Lane, Raumanga, Whangārei 0110	(09) 437 2040	northland@roof.co.nz
Pukekohe	212 Manukau Road, Pukekohe, Auckland 2120	(09) 238 0050	franklin@roof.co.nz
Hamilton	63 Tasman Road, Avalon, Hamilton 3200	(07) 849 5115	waikato@roof.co.nz
Tauranga	80 Portside Drive, Mount Maunganui 3116	(07) 578 2650	tauranga@roof.co.nz
Taupō	1101 Rakaunui Road, Rotokawa 3378	(07) 376 7971	taupo@roof.co.nz
Hawke's Bay	5 Poporo Way, Longlands, Hastings 4175	(06) 281 2586	hawkesbay@roof.co.nz
New Plymouth	11 Oropuriri Road, Waiwhakaiho, New Plymouth 4312	(06) 758 3003	taranaki@roof.co.nz
Palmerston North	653 Tremaine Avenue, Palmerston North Central, Palmerston North 4414	(06) 353 8480	central@roof.co.nz
Wellington	26 Jamaica Drive, Grenada North, Wellington 5028	(04) 238 4390	wellington@roof.co.nz
Blenheim	5 Kendrick Road, Riverlands 7274	(03) 934 5901	blenheim@roof.co.nz
Christchurch	12 William Lewis Drive, Sockburn, Christchurch 8042	(03) 339 2324	christchurch@roof.co.nz
Dunedin	33 Strathallan Street, South Dunedin, Dunedin 9012	(03) 455 4444	dunedin@roof.co.nz
Southern Lakes	3 Proctor Way, Cromwell 9310	(03) 928 6869	cromwell@roof.co.nz
Invercargill	133 Bill Richardson Drive, Avenal, Invercargill 9810	(03) 218 7663	invercargill@roof.co.nz

LIMITATIONS