Interior Panelling & Sarking

Version 4.8 | October 2026

JSC
PREMIUM ARCHITECTURAL & BUILDING SOLUTIONS

INSTALLATION GUIDE

SCOPE

This guide covers the installation of JSC timber panelling and sarking for internal applications, including storage and handling, moisture content, substrate requirements, fixing methods, and maintenance. It is intended for builders and installers.

For design and specification requirements, refer to the JSC Interior Panelling and Sarking Design Guide.

STORAGE AND HANDLING

JSC products should be delivered undamaged by freight and handling. All boards should be inspected on delivery.

Lifting and craning timber packets on to site must be done with extreme care using appropriate equipment such as a forklift, crane forks, cradle, or spreader bars. Product should be unloaded by hand in the absence of mechanical equipment. Timber packets must never be tipped from the truck.

> **Note:** Timber products must not be lifted or craned with chains or straps unless pressure is widely and evenly distributed, and the timber is sufficiently protected from damage.

Always keep the product dry by storing it in an enclosed building. When profiles are intended for use in exterior soffits, they may be stored outdoors provided they remain in JSC packaging wrap and are protected with an additional weatherproof cover. JSC packaging is not suitable for long term external storage. Ensure adequate airflow around the packs to prevent condensation. Do not store boards over standing water or vegetation. All products must be stacked at least 100 mm above ground on clean, dry bearers (for both internal and external storage). Boards must be stored flat and horizontal, never vertically.

Delivery should be scheduled to minimise time on site prior to installation to avoid accidental damage, contamination, or moisture. If conditions are suitable, storing the boards in the room where they are to be installed for several days will allow the timber to acclimatise. Care must be taken to avoid damage to panel tongues, grooves, and faces during installation.

MOISTURE CONTENT

To minimise movement after installation, timber panelling should be at, or slightly below, the equilibrium moisture content of the room/area in which it will be installed. It is best practice to store the timber in its installed environment for 5 days prior to installation in order to equalise its moisture content with the room. Materials in seasonally heated buildings generally have a moisture content of 10–14%.

INSTALLATION REQUIREMENTS

Timber framing must be installed in accordance with NZS 3604:2011. The substrate moisture content must comply with NZS 3602:2003, Table 4. Framing or other substrates must meet deflection, tolerance, and stability limits for the panelling application. The surface must be straight and true. For ceilings and soffits, check trusses, rafters, or other supports for level.

Where additional rigidity or a fixing surface is required, such as over battens, in high-movement environments, or where mechanical fixings alone may not provide adequate support, a rigid sheet substrate (e.g. plywood) can be used beneath the panelling. Substrate selection, including thickness, should be determined by the designer based on span, loading, fixing method, and any relevant building code or manufacturer requirements. Refer to the JSC Interior Panelling and Sarking Design Guide for further guidance.

Any ceiling area prone to heat build-up or air pressure differential needs particular attention at design and installation stage, as these conditions accelerate timber movement.

Where boards are fixed to rafters, in wet areas and for all skillion roofs, install an air barrier directly above the panelling (or substrate, where used) to stop air leakage from bringing moisture into roof cavities.

JSC recommends installing an air barrier to separate the soffit air space from the main building. Without it, wind can pressurise the cavity and force air inside, causing ceiling flexing or draughts through light fittings.

Because temperature can vary significantly inside a building, it is important that ceilings are well insulated and the space is well ventilated in summer to reduce heat build-up, limit timber movement, and maintain coating performance.

DESIGN LAYOUT

Prior to installation, consider the lengths supplied and determine the panel layout. While installing, select individual boards to take advantage of natural variation in timber colour to achieve an aesthetically pleasing colour distribution.

JSC interior panelling can be installed vertically, horizontally, or diagonally on framing or battens at the following maximum centres:

BOARD THICKNESS	CEILING - FIXING TO FRAMING	CEILING - OVER CONTINUOUS PLYWOOD	WALL - FIXING TO FRAMING	WALL - OVER CONTINUOUS PLYWOOD
9mm / 9.5mm	400mm max.	400mm max.	Not allowed	400mm max.
11mm / 12mm	400mm max.	450mm max.	400mm max.	600mm max.
18mm	450mm max.	600mm max.	600mm max.	600mm max.

The fixing centres above refer to mechanical fixing points (clips, nails, or screws). Where panelling is installed over continuous plywood, a flexible adhesive must be used in conjunction with mechanical fixing — adhesive alone is not a substitute for the stated fixing centres.

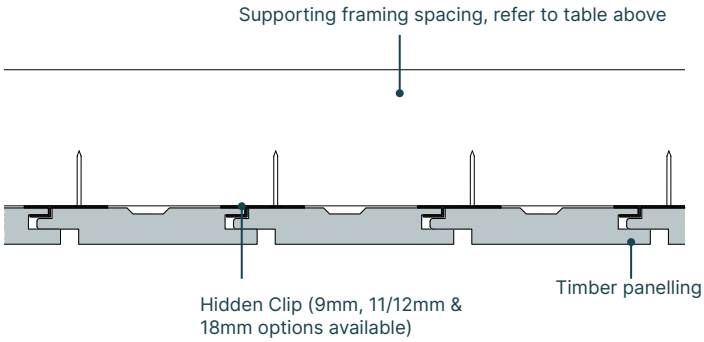
Care must be taken with joints at corners and between walls and ceilings. Joints between walls and floors are generally covered by skirting board.

> **Note:** When thin panelling (e.g. 9.5 mm) is used, restrain insulation or other materials to avoid distortion through pressure from behind.

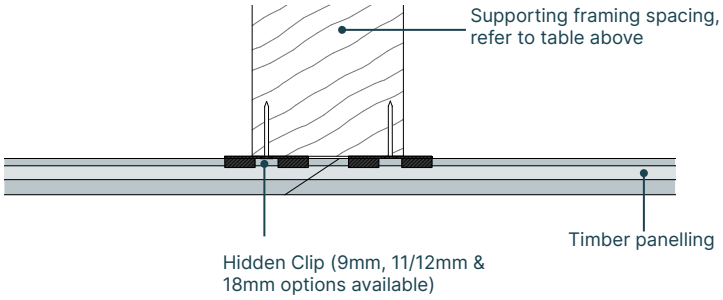
END JOINS

Plan ahead to make optimal use of supplied lengths to achieve a pleasing layout with minimal wastage. Preference should be given to full-length boards, but where joins are necessary, use a splayed or scarfed joint on a batten, stud, or nog and stagger the joins in a random pattern.

> **Note:** Some sizes and species can be machined into T&G End-Matched profiles.
> Contact sales@jsc.co.nz for more information.



Hidden Clip Installation: Section Across Boards



Hidden Clip Installation: Section Along Boards

FIXING

GENERAL REQUIREMENTS

- Ceiling battens or wall framing must be clean and straight if internal panelling is installed directly to them.
- Horizontal panelling may be fixed directly to the studs.
- Extra battens or nogs may be required to achieve 600 mm minimum centres when wall panelling is to be installed vertically.
- Install battens on DPC over concrete blocks prior to installation of panelling with mechanical fixings (refer to fastener manufacturer's requirements).
- Cut boards cleanly with a fine tooth saw and avoid joins wherever possible.
- Use a skirting board to cover visible nail heads at the bottom of the wall.

HORIZONTAL WALL PANELLING

Start the installation from the bottom with the groove towards the floor. It is recommended to start at the top when the height of panelling does not match an exact number of panels or if the floor is uneven - the adjusted board can be hidden behind the skirting. Ensure that the first board is level before fixing. Check level every three boards during fixing. Allow movement gaps in corners and at perimeter edges to accommodate expansion

VERTICAL WALL PANELLING

Start vertical wall panelling from a corner, with grooves towards the corner. Allow movement gaps in corners and at perimeter edges. The last board may need to be scribed or cut to fit accurately against the next surface. Check for vertical every three boards during fixing. If necessary, tap boards into place with a scrap piece to prevent damage to the tongue.

FIXING METHODS

Panelling can be fixed by the following methods. Regardless of the fixing method used, including hidden clips, boards must be pre-drilled prior to fixing to help prevent splitting.

- **Face Nailing** — nails must have a length at least 2.5 times the board thickness in a typical installation.
- **Secret Nailing + Adhesive** — a flexible adhesive must always be used in conjunction with mechanical fixings. When gluing panels to a sheet or lining, apply a continuous bead of adhesive. When fixing to battens, use a controlled dab of adhesive. In both cases, adhesive should spread evenly once the board is pressed onto the substrate, with no adhesive seeping into the grooves of the panelling profiles. Apply adhesive sparingly and evenly. Excess adhesive can squeeze out as drips or runs, particularly on vertical or overhead applications. Do not use adhesive that has expired, as it may thicken and create high points that prevent boards sitting flush. Press boards fully while the adhesive is still workable (within the manufacturer's open time) to ensure even contact and bond across the full board. Adhesive that reaches the board face, including squeeze-out at joints, can also affect coating absorption and result in a patchy or blotchy finish once coated. Remove any excess adhesive from the face immediately, before it cures.
- **Screws**
- **Hidden Clips** — We supply three different clips to fit 9mm, 11/12mm and 18mm thick boards. JSC supplies stainless steel nails and screws for use with hidden clips. 9.5mm boards use the 9mm clip; 11mm boards use the 12mm clip, and 18mm boards use the 18mm clip.



Hidden Clip
(9mm, 11/12mm & 18mm options available)

> **Note:** TMT profiles (TMT Amba, TMT Taiga, and TMT Taxon) are designed to be installed with hidden clips, with the exception of the Wave (TMT842) and Triple Groove (TMT845) profiles.
>
> JSC Standard TG&V profiles (J83–J99) can be installed using face nailing or secret nailing + adhesive, or hidden clips.

A note on adhesive and profile joints: a small amount of glue can penetrate into profile joints and bond boards together. If the boards shrink, this bond can hold multiple boards until the weakest joint fails, creating a larger, more noticeable gap from the accumulated shrinkage. If boards are not bonded in this way, shrinkage occurs evenly across each joint, making movement less visible.

> **Note:** Bostik Wallboard Gold Original, Bostik Wallboard Gold Ultra, and Bostik MS Safe Fix are compatible with JSC Scumble, JSC Coda, and Interior Luxury Wax. The use of a primer (e.g. Bostik Prep P) is recommended to improve adhesion. Follow adhesive manufacturer's instructions.
>
> Testing was done in controlled conditions; site factors may affect results. Always test on a small sample first, before application.

SOFFIT APPLICATIONS

Timber panelling can be used in external soffit applications when the following installation conditions are met:

- The soffit is located in a fully sheltered area and the design presents a low risk, such as a large overhang or a gable end with an overhang angle no greater than 45 degrees.
- All panelling boards are coated on all sides including cut ends prior to installation, with a topcoat applied after installation. Coatings must be exterior-grade and maintained according to manufacturer's recommendations.
- All fixings are compatible with the exposure zone. Stainless steel is always best practice.
- A regular maintenance schedule is in place to monitor coating performance and timber condition.
- Soffits and panelling are not covered by CodeMark. It is the responsibility of the designer to demonstrate compliance with the New Zealand Building Code (NZBC).

BOARD THICKNESS	SOFFIT - FIXING TO FRAMING	SOFFIT - OVER CONTINUOUS PLYWOOD *(EXTERIOR GRADE H3.2)*
9mm / 9.5mm	400mm max.	400mm max.
11mm / 12mm	400mm max.	450mm max.
18mm	400mm max.	600mm max.

Fixing centres must be reduced in high wind zones or exposed sites in accordance with NZS 3604:2011 wind zone provisions.

FINISHES

All dressed surfaces should be lightly sanded and wiped free of dust before coating.

> **Note:** Follow coating manufacturer's requirements at all times.

MAINTENANCE

INTERIOR APPLICATIONS

- **Dust and wipe down surfaces with a soft cloth. Avoid harsh or abrasive cleaners.**
- **Use a mild, pH-neutral detergent and warm water for spot cleaning. Do not use solvents or strong chemicals.**
- **Maintain a stable indoor environment, avoiding prolonged exposure to moisture or direct heat sources.**
- For coating and recoating, refer to the coating manufacturer's specifications for all requirements, including surface preparation, application, and maintenance.

EXTERIOR SOFFIT APPLICATIONS

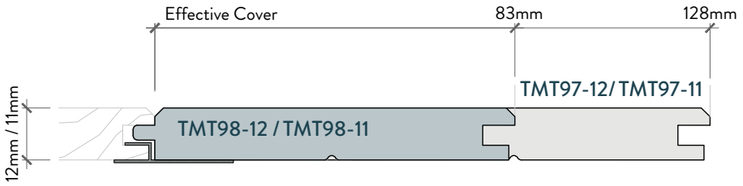
- Keep to an annual cleaning routine using a soft cloth and mild detergent.
- Do not use water blasters or hose directly onto the soffit.
- Re-coat as required and apply the coating following manufacturer's instructions.

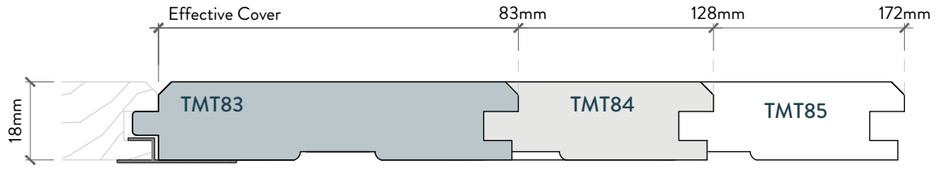
EXTERNAL REFERENCES

- NZS 3602:2003 — Timber and Wood-based Products for Use in Building
- NZS 3604:2011 — Timber-framed Buildings
- BRANZ Good Practice Guide — Internal Linings (Second Edition)
- JSC Interior Panelling BPIR Declaration
- BRANZ Bulletin 610 - Preventing Moisture Problems in Timber-Framed Skillion Roofs (June 2017)

JSC TMT PANELLING PROFILES

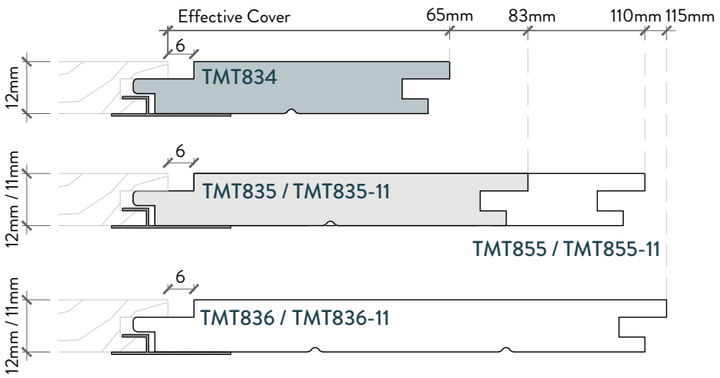
JSC STANDARD TG&V PANELLING PROFILES *HIDDEN CLIP FIXING REQUIRED*

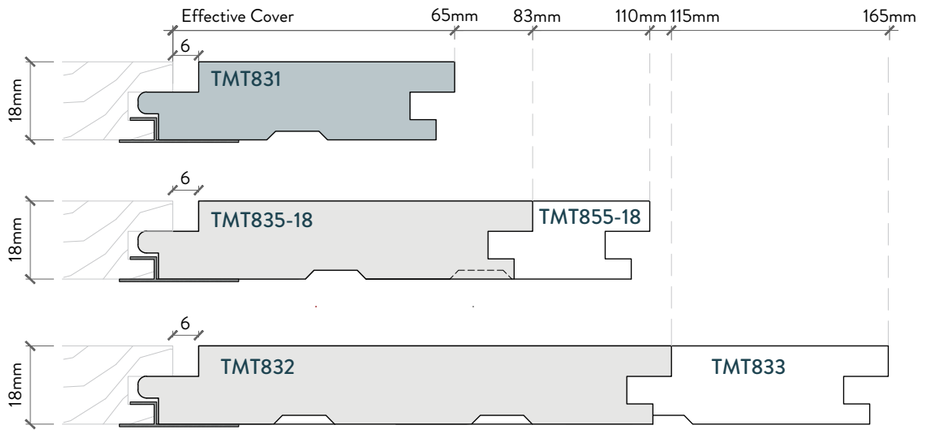




NOTE: 12 mm profiles are not available in TMT Taxon or TMT Taiga

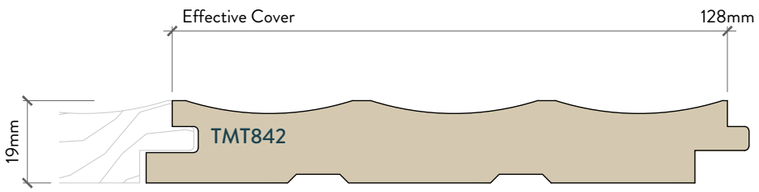
JSC ARCHITECTURAL PANELLING PROFILES *HIDDEN CLIP FIXING REQUIRED*

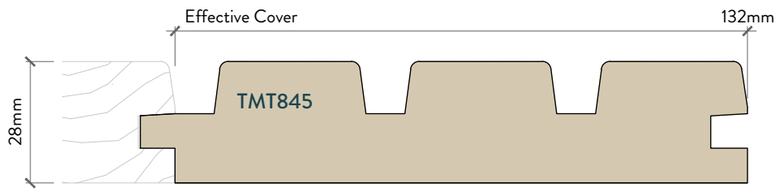




NOTE: 12 mm profiles are not available in TMT Taxon or TMT Taiga

JSC ARCHITECTURAL PANELLING PROFILES (FEATURE)





NOTES

1. Custom profiles available upon request.
2. Not all lengths are available in all profiles.
3. Profiles on this chart show the standard JSC TMT profile range.
4. Not all profiles or lengths are in stock.
5. Profiles are available in Band Sawn finish. Dressed and Brushed finishes are available depending on chosen specie and coating requirement.
6. Fixings: Hidden clips are the recommended fixing method for all TMT profiles except TMT842 and TMT845. TMT842 and TMT845 are fixed by secret nailing with adhesive. Refer to the JSC Panelling Guide for full fixing requirements.
7. Profile thickness varies by species: TMT Amba profiles are 11mm thick; ThermoPine profiles are 12mm thick. Refer to Species Availability table for thickness options by species.
8. Details are subject to change without notification. Refer to www.jsc.co.nz for up to date documentation.
9. JSC panelling must be installed by a suitably qualified and experienced tradesperson in accordance with the chosen cladding specification, installation and maintenance documentation.

SPECIES AVAILABILITY

SPECIES	THICKNESS	AVAILABLE PROFILES
TMT Amba	11mm, 18mm, 28mm	TMT83, TMT84, TMT97-11, TMT98-11, TMT831, TMT833, TMT835-11, TMT835-18, TMT832, T836-18, TMT855-11, TMT855-18, TMT842, TMT845
ThermoPine	12mm, 18mm, 19mm, 28mm	All profiles
TMT Taxon	18mm, 19mm, 28mm	TMT83, TMT84, TMT85, TMT831, TMT833, TMT835-18, TMT832, TMT842, TMT845, TMT855-18
TMT Taiga	18mm, 19mm, 28mm	TMT83, TMT84, TMT85, TMT831, TMT833, TMT835-18, TMT832, TMT842, TMT845, TMT855-18

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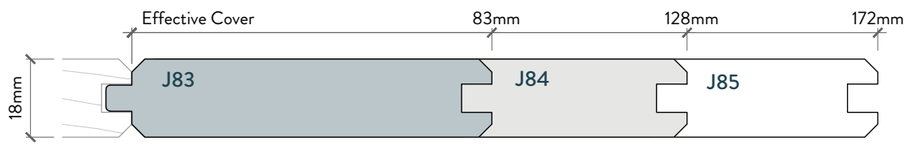
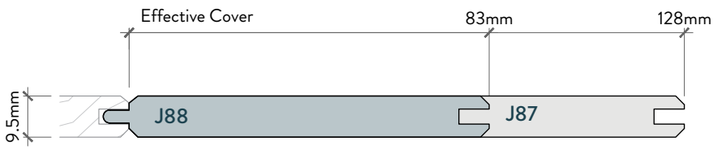
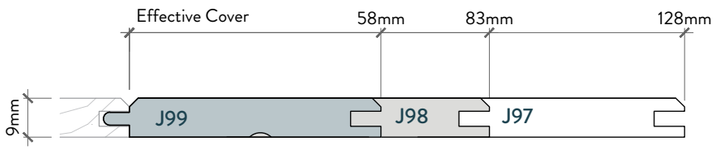
JSC INTERIOR PANELLING AND SARKING PROFILES

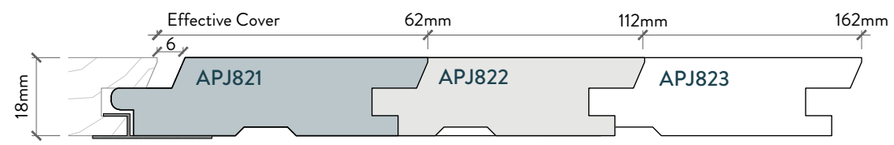
JSC STANDARD TG&V PANELLING PROFILES

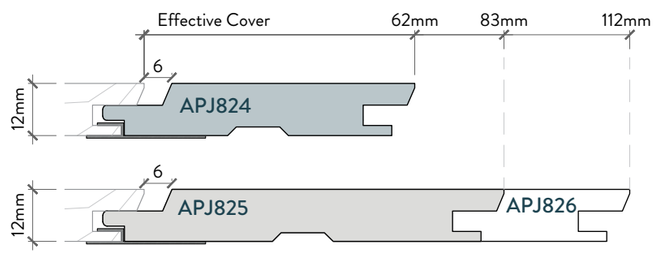


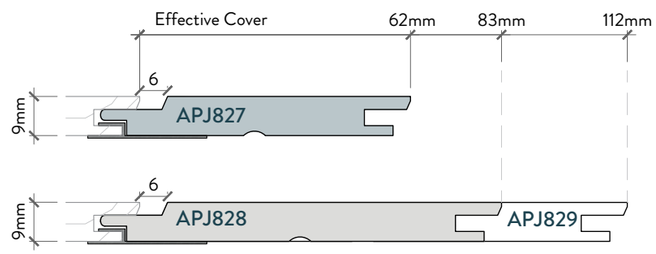




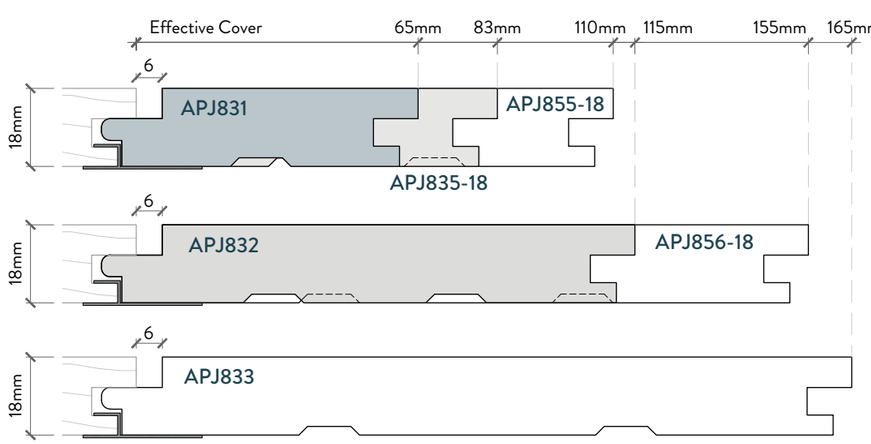
JSC ARCHITECTURAL PANELLING PROFILES (MATCHING JSC RUSTICATED WEATHERBOARDS) *HIDDEN CLIP FIXING RECOMMENDED*

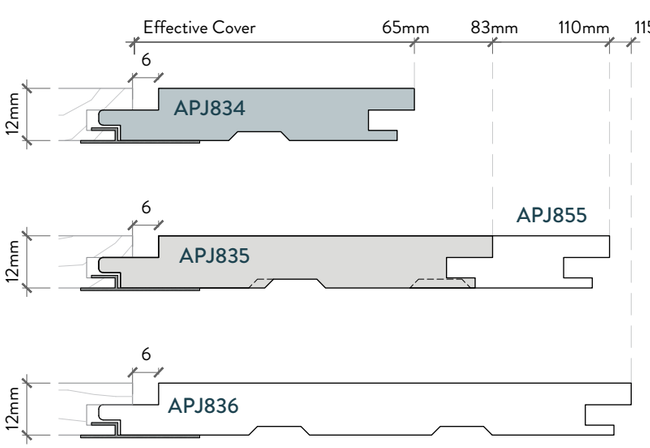


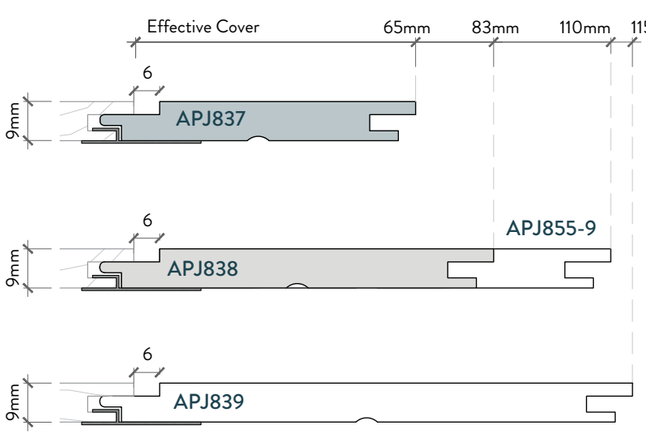




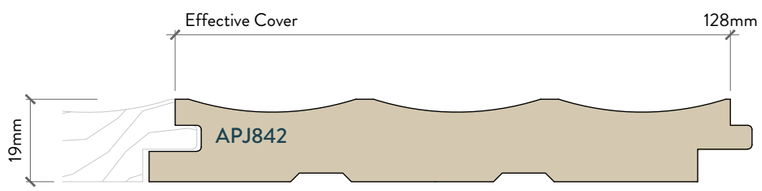
JSC ARCHITECTURAL PANELLING PROFILES (MATCHING JSC VERTICAL SHIPLAP WEATHERBOARDS) *HIDDEN CLIP FIXING RECOMMENDED*

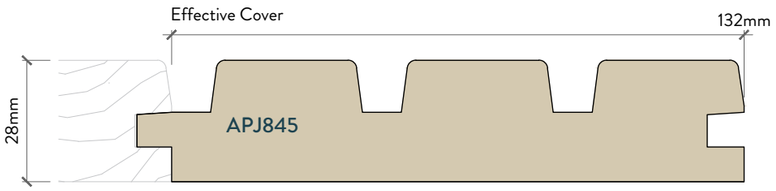






JSC ARCHITECTURAL PANELLING PROFILES (FEATURE)





NOTES

1. Profiles on this chart show the standard JSC Profile range.
2. Some profiles are available end matched.
3. Custom profiles available on request.
4. Not all lengths are available in all profiles.
5. Not all profiles or lengths are in stock.
6. Fixing method varies by category. Hidden clips are recommended for all Architectural profiles except APJ842 and APJ845.
7. Details are subject to change without notification. Refer to www.jsc.co.nz for up to date documentation.

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ONLINE RESOURCES
(SCAN ME)

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Riverhead

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43 McKee Street
Pukete

WELLINGTON
0800 57 26 88
61 Seaview Road
Seaview

CHRISTCHURCH
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Sockburn