RESAWN TIMBER CO.

INSTALLER'S GUIDE TO EXTERIOR WOOD CLADDING



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APPENDICES

available upon request

01. Exterior Wood Soffits and Ceilings
02. Exterior Corners

SECTION 01: Installation Responsibilities + Requirements

Responsibilities

This quick-reference installation guide is to be used alongside RESAWN's Exterior Design Guide, which provides broader technical context and best-practice detailing. Before delivery, customers and installers are required to review all relevant installation documents from RESAWN documents to confirm that substrates and site conditions are properly prepared. Installation should follow this guidance in full.

Contact RESAWN with any questions prior to starting work.

Rainscreen Requirement

To perform as intended over the long term, wood cladding from RESAWN must be installed as part of a complete rainscreen assembly. The rainscreen is not an optional accessory. It is the system that enables proper drying, movement, and durability for exterior wood cladding applications. When all components of the assembly are used together, the cladding remains stable, achieves its full expected service life, and weathers more predictably.



SECTION 02: Delivery

Prior to shipment, RESAWN will communicate delivery details:

- Delivery vehicle type
- Date pallets are expected to ship with estimated transit time
- Pallet dimensions and weight

This information enables the receiver to prepare for a safe and efficient delivery by:

- Establishing an unloading plan and identifying a designated staging area
- Ensuring adequate personnel are available and briefed on the plan
- Confirming all equipment and materials are on-site and ready at time of delivery (e.g., forklift with fork extensions, dunnage for staging)

Unloading is the receiver's responsibility. Delivery trucks are not equipped with lifts; lift gates are not an acceptable unloading method due to pallet's weight and length.



SECTION 03: Receiving

RESAWN carefully packages all cladding to protect it during transit. Please review the following receiving expectations before delivery:

- Cladding arrives flat-packed with protective foam, wrapped, and strapped to pallets - unless unfinished
- Pallets may be up to 208 in. long, 42–45 in. wide, and can weigh up to approximately 3,000+ lbs.
- Keep tally sheets and the packing slip available at delivery to confirm pallet counts and quantities

If visible damage is present at delivery:

STOP

DOCUMENT all damage on the bill of lading before signing, take photos, unload material, but do not unpack it

CONTACT RESAWN immediately for next steps



SECTION 04: Inspection

All cladding must be inspected before installation to confirm it matches the order. Review boards against the approved submittal samples to verify the face and back for intended appearance.

If anything appears incorrect:



STOP do not install the material



DOCUMENT the issue with notes and photos



CONTACT RESAWN immediately for next steps

After inspection is complete, stage and intermix boards from all pallets to distribute natural variation evenly across the installation.



Installing cladding that is damaged, incorrect, or otherwise unsuitable can compromise performance and appearance. For this reason, RESAWN will not be responsible for material replacement or associated labor costs once cladding has been installed.

SECTION 05: Acclimation

Acclimation allows wood cladding to adjust to the project site temperature and humidity before installation. Giving the material time to equalize helps reduce post-installation movement (expansion, contraction, cupping) and supports long-term performance and appearance.

Recommended acclimation periods:

- Install-ready: Abodo®, Accoya® (brief acclimation preferred when possible)
- 7–10 days: Kebony®, Sylva™
- 10–14 days: Cedar, Western Hemlock
- 14–21 days: Cypress

Acclimation time may need to increase in extreme weather or rapidly changing site conditions.

Ensure the following steps are taken during acclimation:

- Store the material in the same humidity and temperature conditions into which it will be installed
- Remove all non-breathable packaging to maximize airflow
- Keep cladding protected from direct weather and excess moisture

SECTION 06: Storage

Store cladding in a dry location, elevated off the ground, with adequate air circulation. Poor storage can damage stability, durability, and finish performance.

Protect from weather:

- Store cladding under a roof whenever possible (e.g., warehouse, garage, or carport); avoid outdoor storage—exposure to damp conditions can cause severe darkening, compromise the finish, and reduce material stability
- Keep cladding shielded from sun, rain, snow/ice, dirt, and debris

Keep cladding elevated:

- Maintain ground separation at all times; pallets must rest on dunnage 4 in. above paved surfaces, 12 in. above unpaved surfaces
- If not on a vapor-controlled slab, place a vapor barrier under pallets and dunnage

Maximize airflow:

- RESAWN packaging standards are designed for shipping, not storage
- For storage, loosen wrap and remove excess foam to let boards breathe
- Never store cladding where moisture can settle into stacks and get trapped

Monitoring

Inspect cladding weekly at minimum to confirm:

- Air is moving between, above, and below cladding
- No moisture buildup
- Cover(s) remains intact and effective

Early identification and correction of issues helps prevent moisture intrusion and surface degradation.





SECTION 07: Rainscreen Assembly + Components

Rainscreen Overview

All cladding supplied by RESAWN is to be installed as a part of a rainscreen assembly.

Rainscreen assemblies maximize drainage and ventilation for the purpose of moisture management which in turn increases the durability and stability of the cladding layer. Review the high-performance exterior wall image below to understand basic rainscreen systems and how RESAWN's wood cladding serves as the outermost weathering layer.

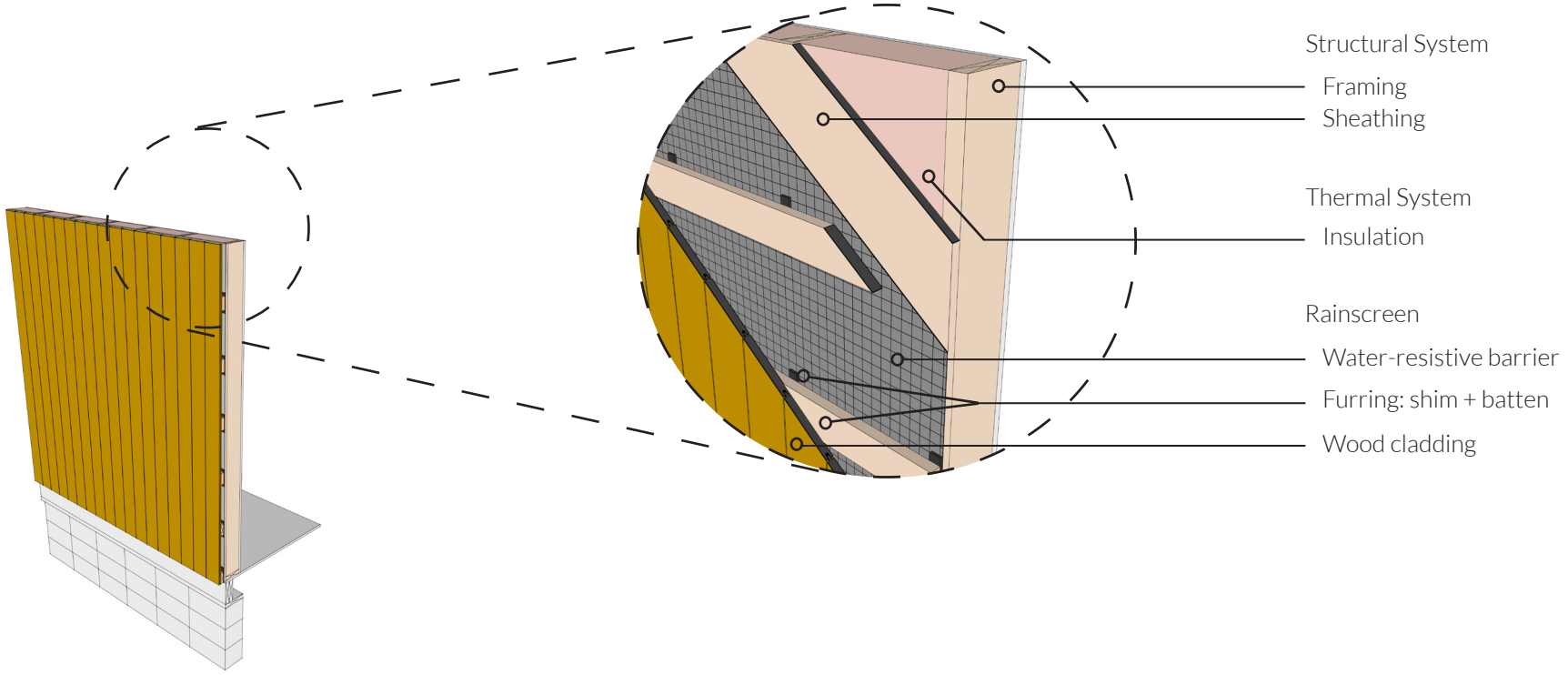


Fig. 1: High-performance Exterior Wall | Primary Systems

SECTION 07: Rainscreen Assembly + Components

Sheathing

Select sheathing to support rainscreen stability and fastener performance.

- CDX plywood is preferred for wet-condition stability and reliable fastener holding
- OSB is acceptable when it is a manufacturer-rated, exposure-resistant panel designed for enhanced moisture durability and fastener performance

Do not rely on sheathing alone for cladding attachment or clip holding.

Water-Resistive Barrier (WRB)

WRBs protect the wall from bulk water intrusion while allowing vapor to escape, supporting long-term drying and durability behind the cladding.

Specify a breathable, self-healing, UV-resistant, monolithic:

- Self-adhered membranes are preferred for continuity and installation speed
- Liquid-applied membranes are acceptable when properly formulated and vapor-permeable

For open-joint cladding, consider black water-resistive barriers without visible branding.



SECTION 07: Rainscreen Assembly + Components

Furring

Furring is a layer of battens or girts installed over the wall assembly to provide a consistent mounting plane and a ventilated drainage cavity behind the cladding.

When possible, prioritize wood-to-wood connections, as they provide the most reliable fastening and the lowest risk of adverse material reactions.

Material Options:

- Modified wood furring: High-durability - recommended
- Kiln-dried wood furring: Use only when rainscreen drying potential is strong
- KDAT PT furring: Treatment chemical may leach to cladding face and requires butyl isolation tape at cladding interface
- Plastic / mesh stand-off furring: Use only when fasteners can achieve full structural penetration
- Metal girts (galv. steel/aluminum/stainless steel): Must isolate from wood to prevent wood-to-metal reactions - some corrosion is possible
- Fiber-reinforced polymer (FRP) girts: An alternative to metal; improved thermal isolation & reduced reaction risk

Orientation:

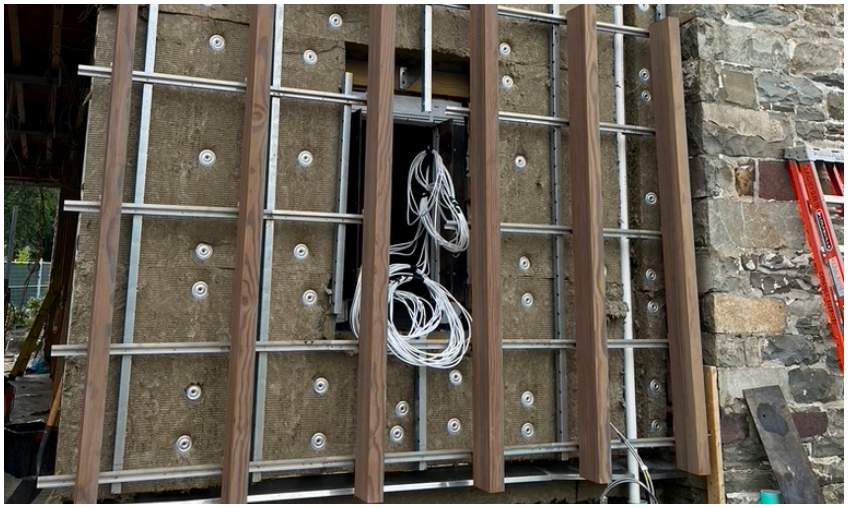
Orientation and depth shall support continuous drainage, airflow, and structural attachment.

- Vertical furring for horizontally installed cladding: Provides continuous drainage plane and cavity ventilation
- Horizontal furring for vertically installed cladding: Must be detailed to maintain vertical drainage/airflow. Provide relief using fluted/notched profiles or a shim-and-batten / batten-and-counter-batten configuration.

Furring depth over sheathing: Min. 3/4 in. thick furring to form a 3/4 in. cavity.

Furring depth over continuous insulation (CI) or where furring provides sole structural support: Min. 1 in. thick furring for required fastener embedment.





SECTION 07: Rainscreen Assembly + Components

Fasteners

Proper fastener selection, corrosion resistance, and placement depth are critical to cladding performance, appearance, and long-term durability;

- Cladding to wood: 304/305 stainless steel (SS) wood-to-wood #7 trim-head, star-drive (T15) screws through piloted, countersunk holes - or equivalent self-piloting screws
- Cladding to metal or FRP girts: 410 SS wood-to-metal self-tapping screws - some corrosion possible at girt connection
- Coastal projects: 316 SS required when within 1/2 mile of coastline - consider when within 3 miles of coastline

Drive fasteners through the cladding and furring into structure with 1-1/4 in. minimum penetration measured from the back of the cladding.



Pneumatic nailing can split boards.
Confirm gun settings and technique with mock-ups. Piloted or self tapping torque driven screws provide more control.



Do not use finish nails, brads, staples, or pin nails to install exterior cladding. Do not use galvanized fasteners to install exterior cladding.



Head-coated SS screws can provide a discrete visual solution when fastener heads are exposed.

Insect Screening

Install corrosion-resistant mesh at opening greater than 1/16 in. (edges, joints, cavity vents) to prevent insect and debris intrusion.



Where screening or cavity elements are visible through wide joints, coat exposed rainscreen elements with black paint or stain for cleaner sightlines.

Caulk / Sealant

Limit sealant to door and window perimeters only, per fenestration manufacturer requirements.

Do not caulk board terminations.
Maintain a discreet, ventilated gap to preserve drainage and drying potential.

SECTION 07: Rainscreen Assembly + Components

Field Cuts + End Grain Protection

Field modification exposes end grain and creates high-risk moisture locations. All board ends, factory and field-cut, must be sealed before the board is fastened in place. This includes:

- Open butt / miter joint cuts
- Return cuts
- Width or length adjustments
- Terminations at corners, openings, and transitions
- Any exposed end grain from field modification

Boards must receive a fresh end cut at a slight angle (15° or 22.5°) prior to sealing.



Improperly sealed end grain may lead to swelling, checking, finish failure, and premature deterioration.

End Sealer by Product:

Use the following end sealers by product:

- Accoya®, Kebony®, Sylva™, Cedar, Cypress, Western Hemlock:
  - High-quality solid or semi-solid stain/sealer
  - Oil-based preferred
  - Water-based OK if > 60°F at install
- Abodo®:
  - Abodo® End Sealer
- SiOO:X® finished cladding:
  - SiOO:X® End Sealer

Offsets / Clearances

- For 1x6 boards, maintain 1/16 in. edge spacing for modified wood and 1/8 in. edge spacing for non-modified wood
- At butt (end) joints, set boards slightly back from tight, about a hair's width, to allow for lengthwise expansion and contraction. Do not force end joints tight
- Maintain offsets at jambs, penetrations, fixtures, and material transitions to interrupt capillary transfer and wicking
- Provide a minimum 1/4 in. gap at vertical terminations and increase as needed where adjacent materials retain moisture or at horizontal base conditions
- Maintain minimum 2 in. separation between cladding ends, window/door headers, and/ or roof lines
- Maintain minimum clearances between wood cladding and organic ground planes as follows:
  - 8 in. for Accoya®
  - 12 in. for Abodo®
  - 18 in. for Kebony®, Sylva™, Cedar, Cypress, Western Hemlock



Any end grain facing upward must be back-cut (15° or 22.5°) to shed water, thoroughly sealed, and protected with flashing or a cap.



For corner and termination detailing, refer to *Appendix 02: Exterior Corners.*

SECTION 07: Rainscreen Assembly + Components

Material Compatibility

Dissimilar materials can react and cause staining, corrosion, or premature cladding degradation.

Risk increases when moisture is present and when water is allowed to sit, wick, or repeatedly drain across the cladding. Pay special attention at base conditions, horizontal ledges, terminations, and locations that collect debris.

Assess any material that touches the cladding, is in the same drainage path, or drains onto it - flashings, trim, fasteners, screens, adjacent metals, masonry/concrete, roofing, sealants, tapes, treated wood, and runoff from copper/metal elements - for reaction risk.

Where risk exists, prevent direct contact and manage water at the interface:

- Isolate dissimilar materials with continuous butyl tape, separation membranes, or compatible isolators
- Use properly detailed flashing (shingled laps, end dams where needed, drip edges, and positive slope to drain)
- Keep interfaces ventilated and drainable; avoid creating sealed pockets that trap moisture
- Confirm fastener and flashing compatibility with adjacent materials to avoid galvanic corrosion, and avoid runoff from reactive metals onto wood surfaces





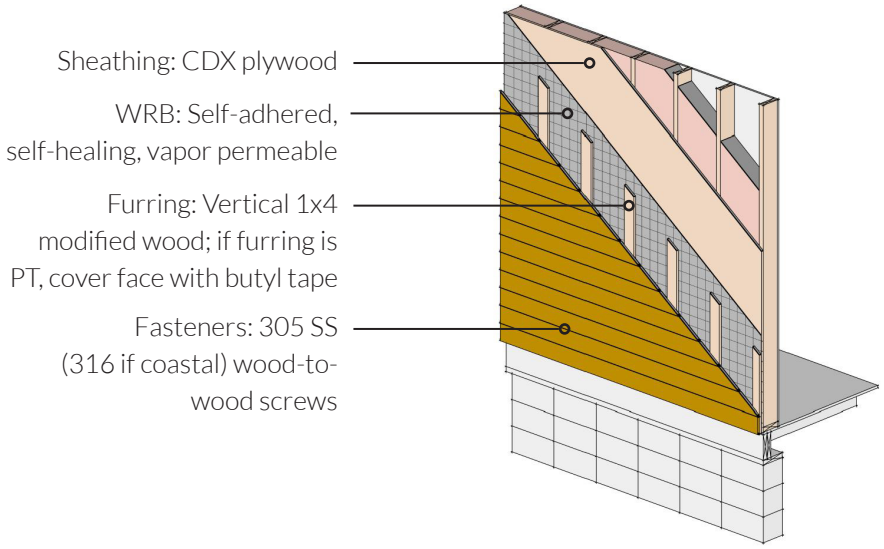


Fig. 2: Residential T&G Horizontal Installation
Batten + WRB

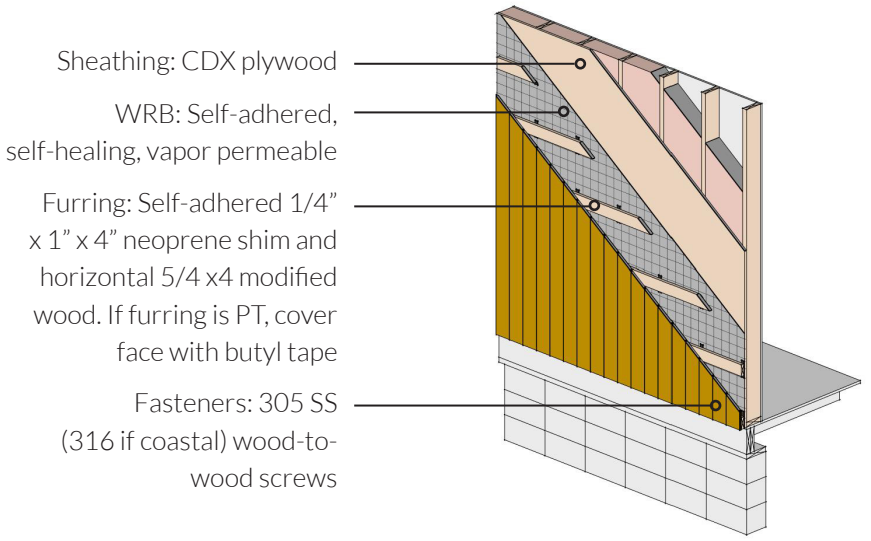


Fig. 3: Residential T&G Vertical Installation
Shim and Batten + WRB

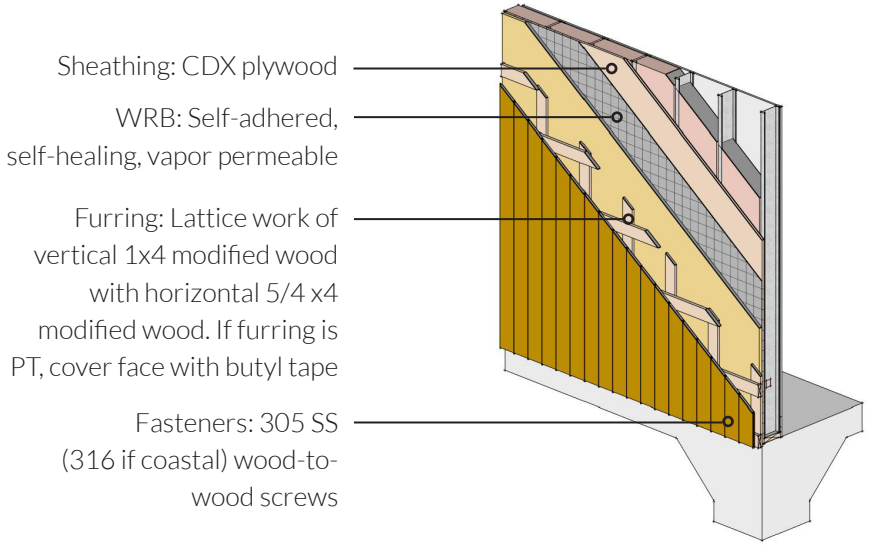


Fig. 4: Commercial T&G Vertical Installation
Batten and Counter-Batten + Outboard CI + WRB

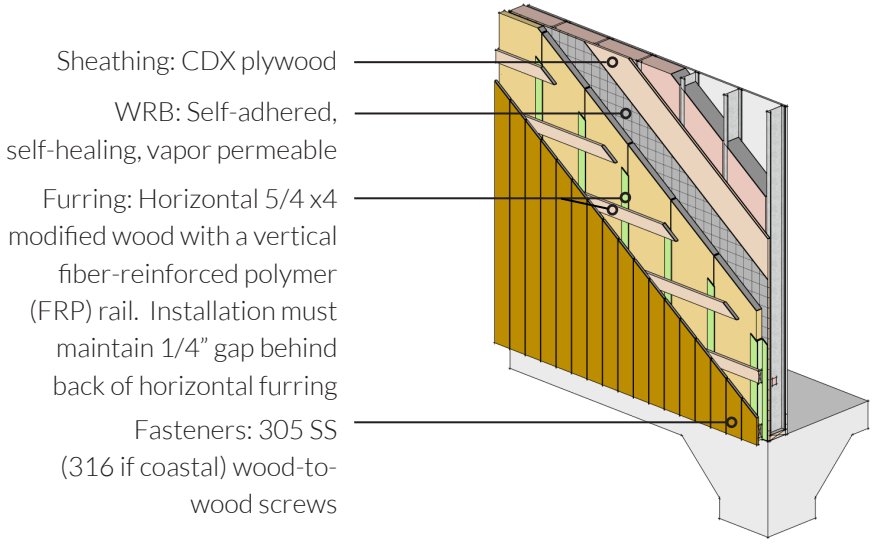


Fig. 5: Commercial T&G Vertical Installation
Batten over FRP Rail + Outboard CI + WRB

SECTION 09: Common Rainscreen Assemblies - Section Views

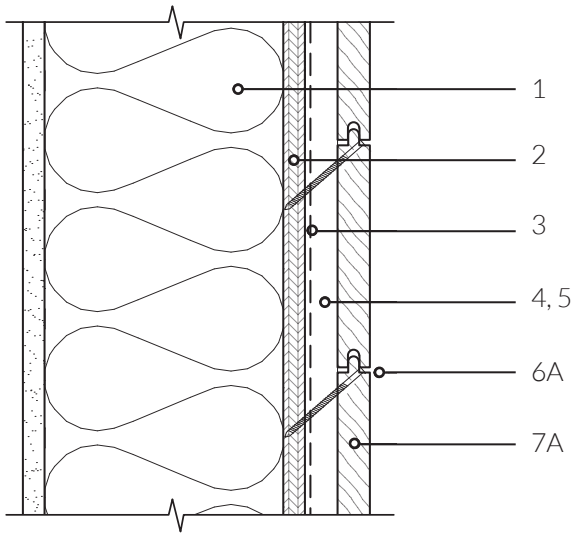


Fig. 6: Profile Tongue + Groove
Section View - Horizontal Cladding

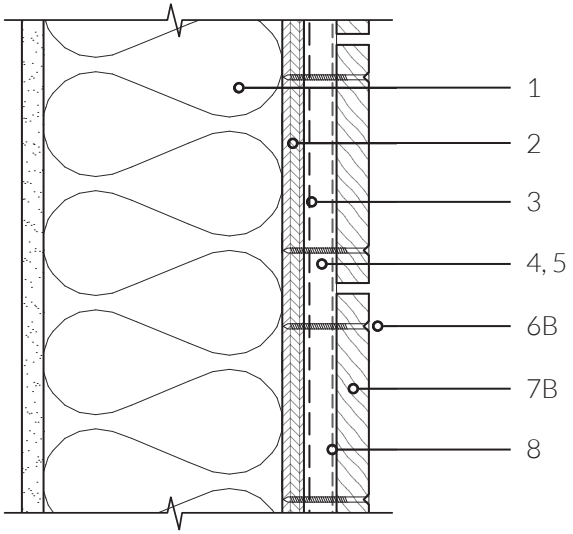


Fig. 7: Profile S4S Open Joint
Section View - Horizontal Cladding

Component	Dimensional & Material Guidance
1. Structural Wall	Refer and or consult with project architect for project details.
2. Sheathing	Provide a product that is moisture resilient and stable. Fasten per code with panel joints gapped for expansion.
3. WRB	Provide a breathable, self-healing, UV-resistant, monolithic membrane. Follow WRB manufacturer's guidelines for horizontal and vertical lap joints. Integrate fully with flashings.
4. Cavity / Gap	3/4" continuous vertical cavity is shown. Ensure top and bottom venting (screened) to allow unobstructed airflow and drainage.
5. Furring	Modified wood furring, 3/4" in depth and spaced 16" OC, is shown. Thoroughly fasten furring to structural studs. Ensure all furring faces are plumb, straight, and evenly aligned to maintain consistent cavity depth and to allow cladding to sit flat and flush.
6A. Fasteners	Stainless steel wood-to-wood screws spaced 16" OC, are shown. Drill pilot holes at the base of the tongue of the profile at an angle. Ensure penetration of 1-1/4" into wood fiber behind the cladding.
6B. Fasteners	Stainless steel wood-to-wood screws spaced 16" OC, are shown. Ensure penetration of 1-1/4" into wood fiber behind the cladding. Drill pilot holes at least 3/4" from board edges. Maintain straight, consistent alignment of fastener placement across boards, as heads remain exposed.
7A. Wood Cladding	1x6 tongue-and-groove profile shown. Provide uniform expansion spacing between boards, ranging from 1/16" to 1/8". Temporary shims, or a gapping jig, may be used to ensure uniformity.
7B. Wood Cladding	1x6 S4S open-joint profile shown. Provide uniform expansion spacing between boards, ranging from 1/8" to 3/8". Temporary shims, or a gapping jig, may be used to ensure uniformity. Open joints reveal the substrate; provide a durable, UV-stable, single-color WRB for a clean, uniform appearance.
8. Insect Screen	In an open joint assembly, provide a corrosion-resistant mesh behind the cladding designed to resist shrinkage, stretching, impact and weathering.

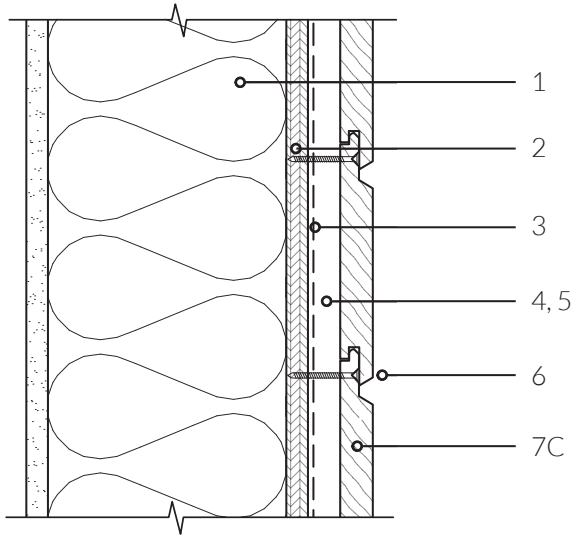


Fig. 8: Profile WB10
Section View - Horizontal Cladding

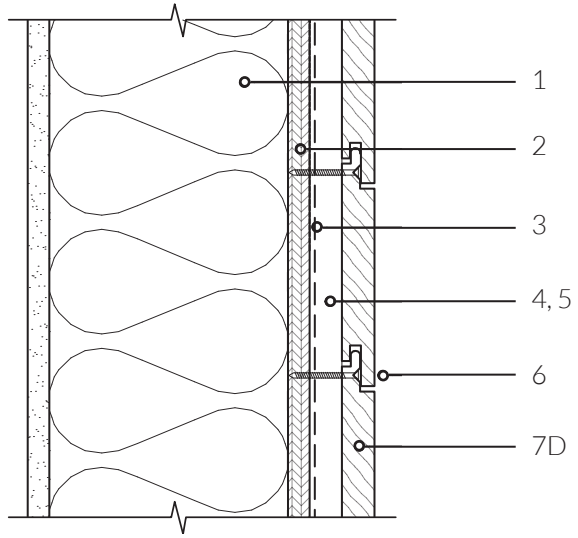


Fig. 9: Profile SEM
Section View - Horizontal Cladding

Component	Dimensional & Material Guidance
1. Structural Wall	Refer and or consult with project architect for project details.
2. Sheathing	Provide a product that is moisture resilient and stable. Fasten per code with panel joints gapped for expansion.
3. WRB	Provide a breathable, self-healing, UV-resistant, monolithic membrane. Follow WRB manufacturer's guidelines for horizontal and vertical lap joints. Integrate fully with flashings.
4. Cavity / Gap	3/4" continuous vertical cavity is shown. Ensure top and bottom venting (screened) to allow unobstructed airflow and drainage.
5. Furring	Modified wood furring, 3/4" in depth and spaced 16" OC, is shown. Thoroughly fasten furring to structural studs. Ensure all furring faces are plumb, straight, and evenly aligned to maintain consistent cavity depth and to allow cladding to sit flat and flush.
6. Fasteners	Stainless steel wood-to-wood screws spaced 16" OC, are shown. Drill pilot holes within the provided profile's groove. Ensure penetration of 1-1/4" into wood fiber behind the cladding.
7C. Wood Cladding	1x6 WB10 profile shown. Provide uniform expansion spacing between boards, ranging from 1/16" to 1/8". Temporary shims may be used to ensure uniformity. WB10 is only supplied in Abodo VG.
7D. Wood Cladding	1x6 SEM profile shown. Provide uniform expansion spacing between boards, ranging from 1/16" to 1/8". Temporary shims may be used to ensure uniformity.

SECTION 09: Common Rainscreen Assemblies - Section Views Continued

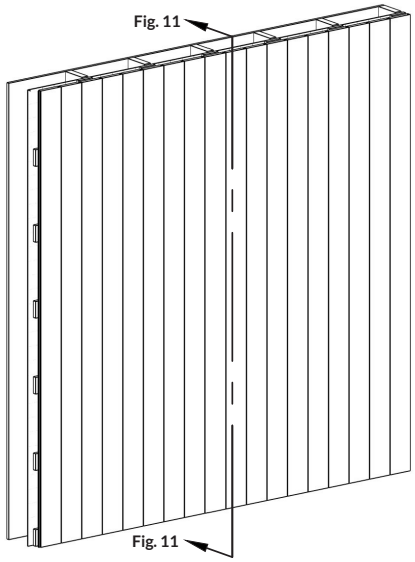


Fig. 10: Profile S4S Open Joint
3D View for Reference - Vertical Cladding

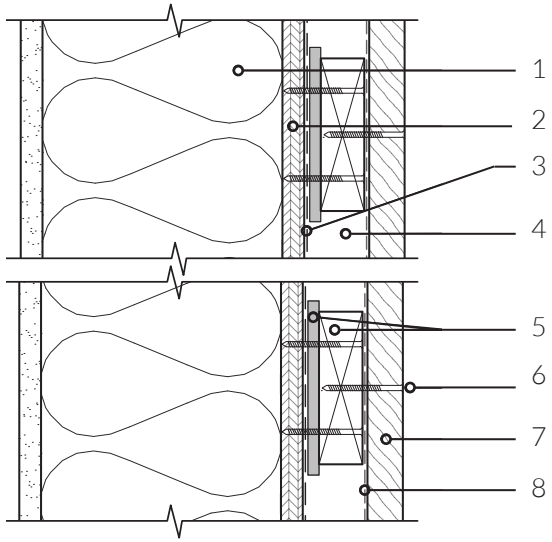


Fig. 11: Profile S4S Open Joint
Section View - Vertical Cladding

Component	Dimensional & Material Guidance
1. Structural Wall	Refer and or consult with project architect for project details.
2. Sheathing	Provide a product that is moisture resilient and stable. Fasten per code with panel joints gapped for expansion.
3. WRB	Provide a breathable, self-healing, UV-resistant, monolithic membrane. Follow WRB manufacturer's guidelines for horizontal and vertical lap joints. Integrate fully with flashings.
4. Cavity / Gap	1-1/4" vertical cavity (shim + furring) is shown. Ensure top and bottom venting (screened) to allow unobstructed airflow and drainage.
5. Furring	Vertical self-adhering shim, 1/4" in depth and spaced to align with structural studs, in use with horizontal modified wood furring, 1" in depth and spaced 24" OC, is shown. Thoroughly fasten shims and modified wood furring to structural studs. Ensure all shim and furring faces are plumb, straight, and evenly aligned to maintain consistent cavity depth and to allow cladding to sit flat and flush.
6. Fasteners	Use stainless steel wood-to-wood screws spaced 16" OC. Ensure penetration of 1-1/4" into wood fibers behind the cladding. Drill pilot holes at least 3/4" from board edges. Maintain straight, consistent alignment of fastener placement across boards, as heads remain exposed.
7. Wood Cladding	1x6 S4S open-joint profile shown. Provide uniform expansion spacing between boards, ranging from 1/8" to 3/8". Temporary shims, or a gapping jig, may be used to ensure uniformity. Open joints reveal the substrate; provide a durable, UV-stable, single-color WRB for a clean, uniform appearance.
8. Insect Screen	In an open joint assembly, provide a corrosion-resistant mesh behind the cladding designed to resist shrinkage, stretching, impact and weathering.

SECTION 10: Finishing

End Sealing
See Section 07, page 10.

Touch-Up
The approach to touch-up depends on the selected finish and should be confirmed with RESAWN during product selection.

- Some factory tones and finishing processes cannot be duplicated in the field, and in those cases available touch-up kits are limited to clear sealers only
- Localized touch-ups may flash or alter sheen or color; where a spot repair would be visible, replace or refinish the full board rather than treating a small area
- Before any field application, test the touch-up approach on scrap, allow it to fully cure, and confirm the final appearance matches expectations

Site Coats
Some cladding products require a final on-site coat after installation. Follow the finish-specific site-coating instructions provided by RESAWN for the product used.

SECTION 11: Lifecycle Maintenance

Wood cladding is a dynamic exterior material and requires planned, ongoing maintenance. Products described as “near-zero maintenance” reduce intervention, but they do not eliminate the need for routine monitoring and care. Proper monitoring, cleaning, and renewal protect the durability of the assembly and preserve the intended appearance over the full service life of the cladding.

Maintenance frequency depends on façade orientation, UV / weather exposure, and (micro)climate.

Plan maintenance as part of the overall service-life strategy. Durability warranties typically cover only a portion of that lifecycle.

Maintenance is anchored in three practices:

1. Routine Monitoring
   - Inspect the cladding seasonally or at minimum annually to identify early signs of wear or moisture-related issues
   - Pay special attention to high-exposure elevations, horizontal transitions, penetrations, and areas with limited drying
2. Cleaning
   - Clean cladding as required by exposure and accumulation (dust, pollen, runoff staining, biological growth)
   - Cleaning methods and frequency vary - use procedures approved for the specific RESAWN system installed
3. Recoating / Renewal Planning
   - Establish expected recoat or renewal intervals during product selection with your specification consultant to align with performance needs and aesthetic goals
   - Follow RESAWN maintenance guidance for finish-specific intervals, surface prep, and compatible coating products

SECTION 12: Component Options

Products below are for reference and are not sold by RESAWN.

Sheathing:
- AdvanTech® - Huber Engineered Wood
- Zip System(s)® - Huber Engineered Wood
- DensGlass® - Georgia Pacific
- GoldBond® eXP®

Water-Resistive Barriers:
- Vaproshield - PanelShield™ SA
- Vaproshield - RevealShield® SA
- Vaproshield - WrapShield® SA
- Benjamin Obdyke - HydroGap® Drainable House Wrap
- Henry - Blueskin® VP100
- Rothoblaas - Transpir EVO UV 210

Drainage Mats:
- Vaproshield - WrapShield® RS
- Benjamin Obdyke - Slicker® Classic Rainscreen
- Henry - Weathersmart® Rainscreen

Furring:
- Stand-Off Furring
  - Vaproshield - VaproBatten™
  - Battens Plus - BattenUP
  - Cor-A-Vent - SV-3, SV-5
  - Quarrix - ProTect Furring Strip
- Fluted Metal Furring
  - Monarch - vented hat channel
  - ClarkDietrich - ProChannel Ci™
  - Garland Co.- vented hat channel
- Fiber-Reinforced Polymer
  - Green Girt CMH™
  - Cladiator Slotted-Z®

Wood-to-Wood Fasteners:
- HeadCote™ - Stainless Deck Screws (305 and 316 grade)
- Simpson Strong Tie - Exterior Wood Trim-Head Screw - 6 Lobe Drive (305 and 316 grade)
- GripRite - Max Stainless Trim Screws (305 grade)
- GripRite - PrimeGuard Max Ring Shank Siding Nail (304 grade)
- Bostitch - Collated Ring Shank Siding Nail (304 and 316 grade)

Wood-to-Metal Fasteners:
- Simpson Strong Tie - Self-Drilling Siding Screw (410 grade)

Insect Screening:
- Cor-A-Vent - SV-3, SV-5
- Quarrix - ProTect Siding Starter

Isolation:
- NewTechWood - Joist Tape
- Zip System - Panel System Tape
- Protecto Wrap - Deck Joist Tape™

Accessories:
- Expansion Gapping Shim - Barwalt Horseshoe Shim
- Drainage Shim - VaproShim™ SA

Adhesive:
- SikaBond PUR Construction Adhesive
- Loctite Ultimate Grab SMP Adhesive

Cleaning:
- Ettore polyfiber soft general wash brush

Finish Application:
- Shur-Line finish applicator pad

End Sealer:
- Benjamin Moore - Woodluxe® Exterior Stain + Sealer
  - Oil-based, semi-solid
  - Water-based, solid
- Sherwin Williams - SuperDeck® Exterior Stain
  - Oil-based, semi-solid
  - Waterborne, solid