

Outside corner for horizontal application

Vertical joint

Outside corner for vertical application

Inside corner

Junctions with other materials

Around openings

Around ventilation ducts

NEXT GENERATION CLADDING SOLUTIONS

Building high-quality, long-lasting developments that create a better environment for residents and the community doesn't cost a fortune with **CERA CLAD**[®]. Our proprietary Triple Coat Finishing System maintains the original vibrant color with our UV Blocking Ceramic Coating, while our photocatalytic coating provides self-cleaning performance that eliminates virtually all maintenance needed to keep your asset looking new.

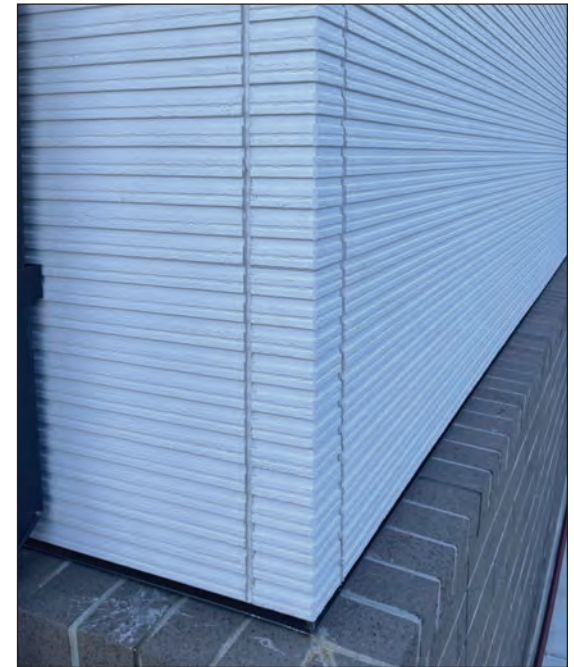


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Product Information

PRODUCT DESCRIPTION

CERACLAD is a fiber cement panel rain screen system manufactured by KMEW Co., Ltd. All panel products meet or exceed the standards of ASTM 1186 and ICC-ES AC-90. CERACLAD Hollow Core products are Type A, Grade I as defined in ASTM 1186.

MADE FROM RECYCLED MATERIALS

Consisting of approximately 45% recycled material, the panels are 100% recyclable, factory finished with no VOC, and contain no asbestos. Fly ash and pulp are included as recycled materials, reducing resource consumption during production. In our manufacturing process, all discharged water is treated by the latest treatment technologies and recycled as much as possible.

- LEED certified projects
- HPD (Health Product Declaration) certified material



LIVING FUTURE
CORPORATE MEMBER

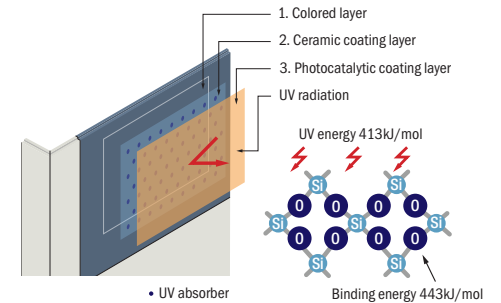
<p>FIRE AND COMBUSTIBILITY</p> <p>Summary of Test Methods</p> <p><u>US</u></p> <p>ASTME84, ASTME119, NFPA285, NFPA268</p> <p><u>Canada</u></p> <p>ULC-S114, ULC-S135</p>	<p>TRANSVERSE LOADING</p> <p>Consult ICC-ESR 1627 code compliance report for Allowable Transverse Loads (design pressure /ASD) with 3.0 safety factor applied.</p>
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CERACLAD TRIPLE COATING TECHNOLOGY

1. Color Layer -
Factory Finish

2. Ceramic Coating -
No Color Fading

3. Photocatalytic Coating Layer -
Self-Cleaning, Air Purifying, Anti-Virus



The main skeleton of the **CERACLAD** panel is 100% inorganic so bonding is stronger than the ultraviolet energy and there is almost no deterioration.

CERAMIC COATING

CERACLAD's inorganic ceramic coating has excellent UV blocking properties to protect the color layer from ultraviolet rays and minimize fading of the outer wall. Maintenance costs are reduced by virtually eliminating the need for repainting. **This technology is exclusive to CERACLAD.**

PHOTOCATALYTIC COATING

Naturally Self-Cleaning - Sunshine Decomposes Dirt, Rain Washes it Away

CERACLAD's photocatalytic coating is energized by the presence of light and transforms the coated surface to create a 'self-cleaning' functionality. Dirt is decomposed by the sun (UV Rays), and weakening adhesion to the surface and the super-hydrophilic property helps rainwater to wash it away.

AIR PURIFYING

The photocatalytic coating decomposes car exhaust and other pollutants in the air (NO_x and SO_x) and turns them into NO₃ harmless polyatomic ions, leaving the air cleaner.

SOLID-CORE PANELS

Panel Thickness: 5/8" (16mm)

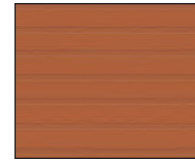
Joint: T-Joint Caulk Free



Cashmere Smooth



Zen Garden



8 Reveal



Urban Cedar



Rustic Wood



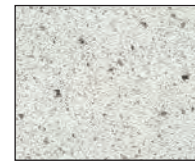
Antique Sawn



Board Formed Concrete



Cast Stripe



Elements/
Exposed Aggregate



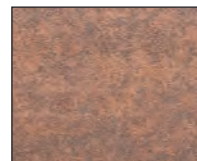
Elements/Ashlar
Slate



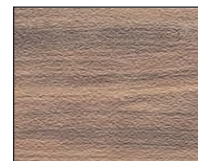
Elements/Blacken
Steel



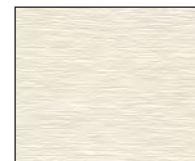
Elements/Weathered
Concrete



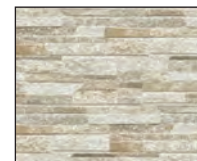
Elements/Corten
Steel



Elements/Walnut



Fiotto



Granite



Mosaic Tile



Modern Brick



Antique Brick



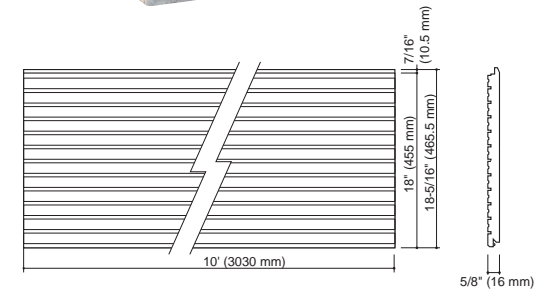
Gridline



Strahl



Sho Sugi Ban



HOLLOW-CORE PANELS

Panel thickness: 5/7" (18mm)

Joint: Caulk joint



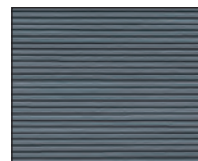
Holme



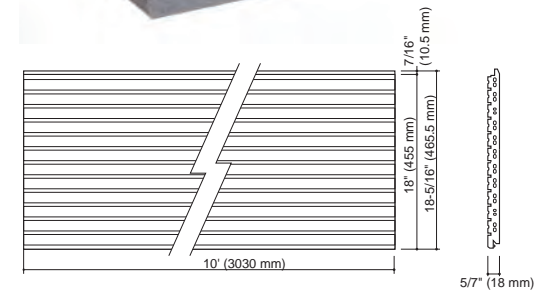
Mille Feuille



Barnwood

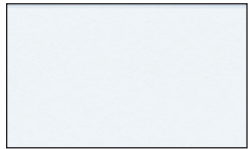


Modern Stripe

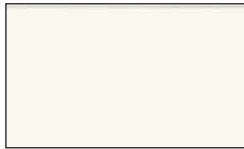


Product Information

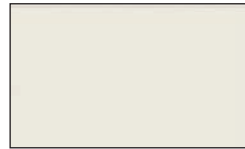
CERACLAD'S PALETTE OF 15 STANDARD COLORS



Arctic White



Pearl



Silk



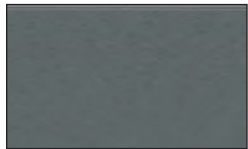
Silver Gray



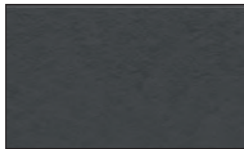
Mid Gray



Dusky Gray



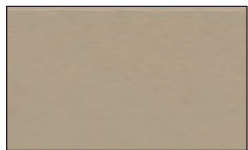
Slate



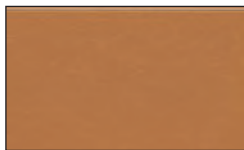
Charcoal



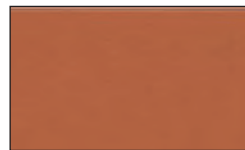
Wheat



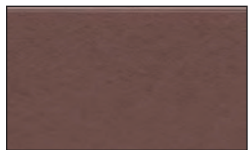
Brass



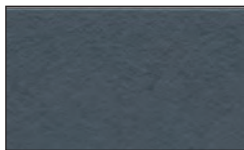
Daisy Orange



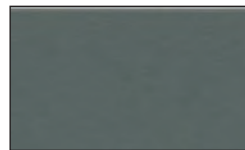
Saffron



Burgundy



Midnight Blue



Dark Olive

THE CREATIV™ CUSTOM COLOR PROGRAM – OUR PATTERNS WITH YOUR FLAIR FOR COLOR

We heard you! You wanted more choices and we brought you CREATIV, the CERACLAD custom color program with nearly unlimited choices.

We keep those colors true with two factory-applied finish coats to protect CERACLAD CREATIV panels from damaging ultraviolet rays.

LEARN MORE AT CERACLAD.COM

CREATIV™

2-COAT FINISH CUSTOM COLOR

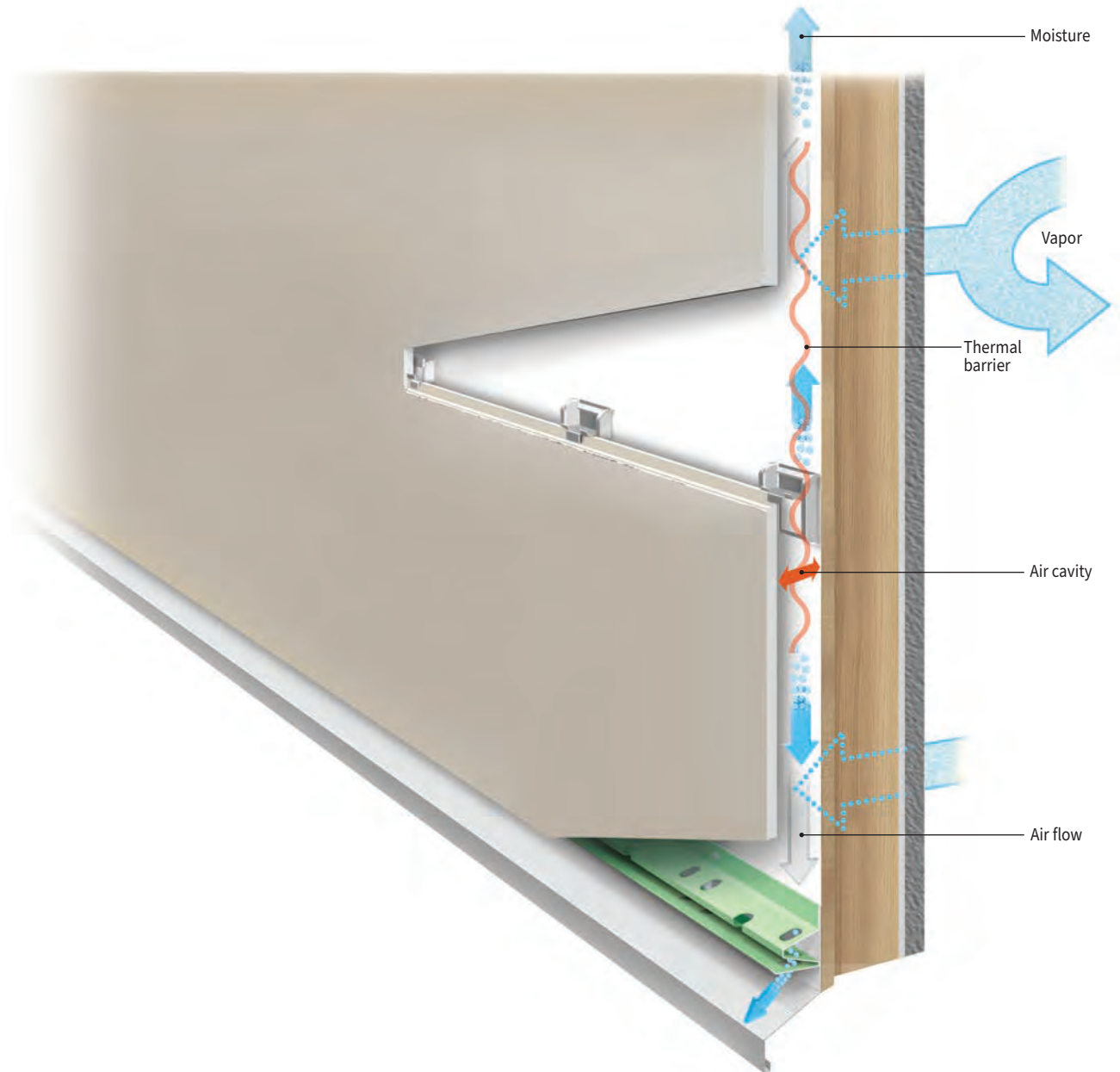
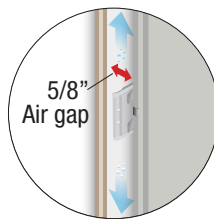


RAINSCREEN MOISTURE MANAGEMENT

CERACLAD's Rainscreen Moisture Management System is an advanced wall assembly that incorporates proven rain-shielding technology. The system consists of pre-finished siding panels and innovative mounting clips and accessories that are manufactured and designed for durability and ease of installation.

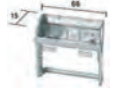









Our exclusive technology combines a durable weather-resistant exterior with an internal ventilation layer that allows moisture to escape.

- Moisture management
- Air cavity
- Air flow
- Helps to prevent mold from growing






Installation Accessories



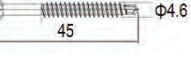
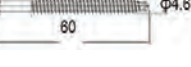
COMMON COMPONENTS

Name (SKU)	Photo	Material	Places of Application
Panel clip (B10115)		Hot-dip zinc-aluminum-magnesium alloy coated steel	Used for fixing the panel to substructure
Minimum Quantity to Order	30 pieces/bag	10 pieces/box	
	10 bags/box		
Corner clip (B101153)		Hot-dip zinc-aluminum-magnesium alloy coated steel	Used for fixing the preformed corners
Long clip (B10155)		Hot-dip zinc-aluminum-magnesium alloy coated steel	Used for fastening the panel to substructure for higher wind load requirements.
T-shaped aluminum joiner (B3616F4)		Aluminum	Used to form vertical panel joints (panel to panel)
L-shaped aluminum joiner (B3616KF4)		Aluminum	It is applied on the inside and outside corners, jambs and other vertical abutments.
Spacer 15 (RY82S15)		Polypropylene	Used as backing for face fastener locations to eliminate deflection of the panel.
Spacer 2 (RY82S02)		Polypropylene	Used for adjusting unevenness of the substrate
Water proof sealer (LTKMB3103C)		Silane water repellent	It is applied on the panel edges
Repair putty (B4901)		Acrylic emulsion	It is used for scratches, chips and holes from face screws.
Repair paint (Different for each SKU)			It is used on spots where putty is applied and scratches.



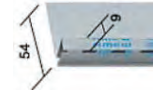
FASTENERS FOR WOOD STRUCTURE

Name (SKU)	Photo	Material	Places of Application
Clip screw 35 for wood substructure (B881135)		Stainless steel	Used for attaching clips to a wood substructure
Clip screw 55 for wood substructure (B88553)		Stainless steel	Used for attaching clips to a wood substructure
Face nail 65 for wood substructure (B8765R400)		Stainless steel	It is used to fasten the panel in places where the use of clips is impossible or where necessary to strengthen the fastening



FASTENERS FOR STEEL STRUCTURE

Name (SKU)	Photo	Material	Places of Application
Clip screw 16 for metal substructure (B885116)		Stainless steel	Used for attaching clips to a steel sub-framing such as hat channel
Clip screw 30 for metal substructure (B885130)		Stainless steel	Used for attaching clips to steel stud
Face screw 45 for metal substructure (B885245)		Stainless steel	It is used to fasten the panel in places where the use of clips is impossible or where necessary to strengthen the fastening
Face screw 60 for metal substructure (B885260)		Stainless steel	It is used to fasten the panel in places where the use of clips is impossible or where necessary to strengthen the fastening





COMPONENTS FOR HORIZONTAL APPLICATION

Name (SKU)	Photo	Material	Places of Application
Starter bar for horizontal application (B101152)		Hot-dip zinc-aluminum-magnesium alloy coated steel	Serve as a support for the first panels in the case of horizontal installation. Applied on the sill of the building before the installation of the panel.
Metal caulking joiner - horizontal (B2716)		Zinc/aluminum coated steel	Minimum Quantity to Order 15 pieces/box
Metal caulking joiner - horizontal (B2719K)		Zinc/aluminum coated steel	Minimum Quantity to Order 15 pieces/box

COMPONENTS FOR VERTICAL APPLICATION

Name (SKU)	Photo	Material	Places of Application
Starter bar for vertical application (B101152)		Hot-dip zinc-aluminum-magnesium alloy coated steel	Serve as a support for the first panels in the case of vertical installation. Applied on the sill of the building before the installation of the panel.
Metal caulking joiner - vertical (B2713K)		Zinc/aluminum coated steel	Minimum Quantity to Order 15 pieces/box

SIDING PANEL INSTALLATION ACCESSORIES

	Spacer Block	Repair Putty	Repair Paint	Clip Screw
Product No.	RY82S15	B4901		B88352
Product				
Minimum Quantity to Order	22 blocks per strip 6 strips per box	1 piece	1 set/box	500 pieces/box
Material	Polypropylene			Stainless steel

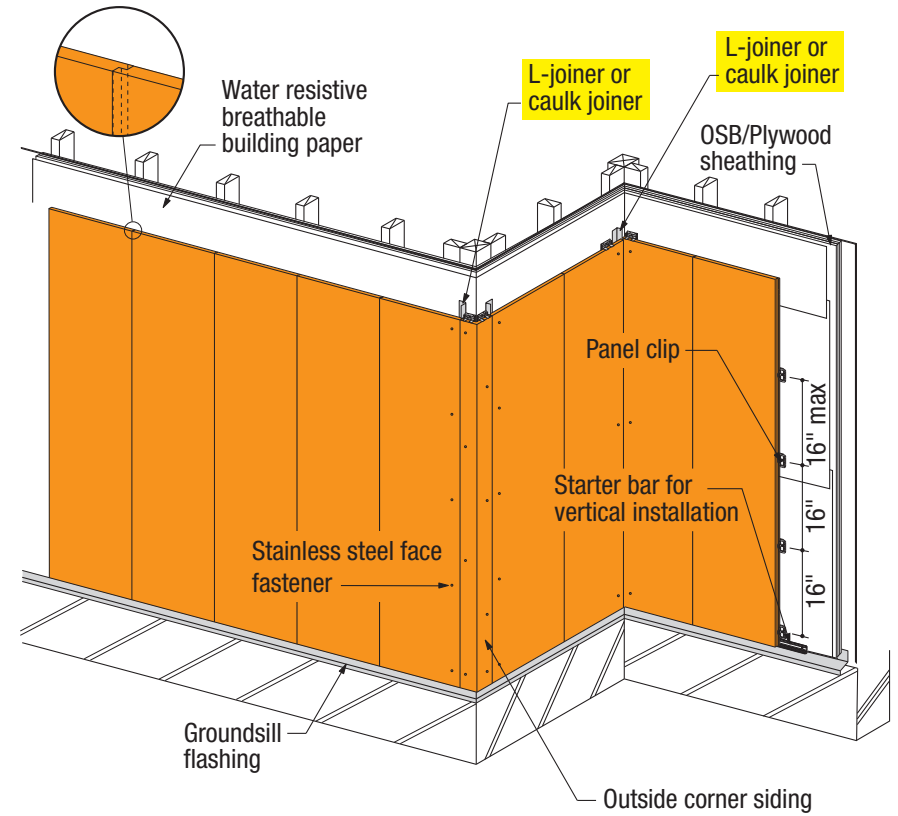
NEW
Caulk-Free T-joint



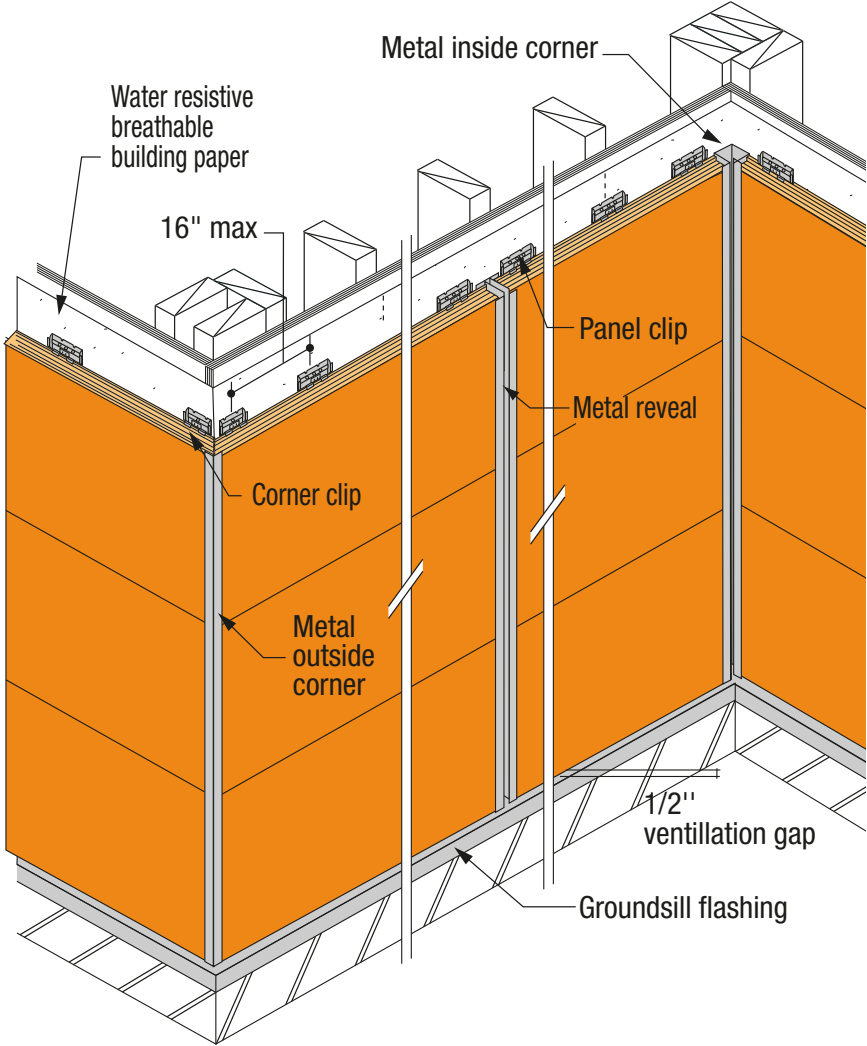
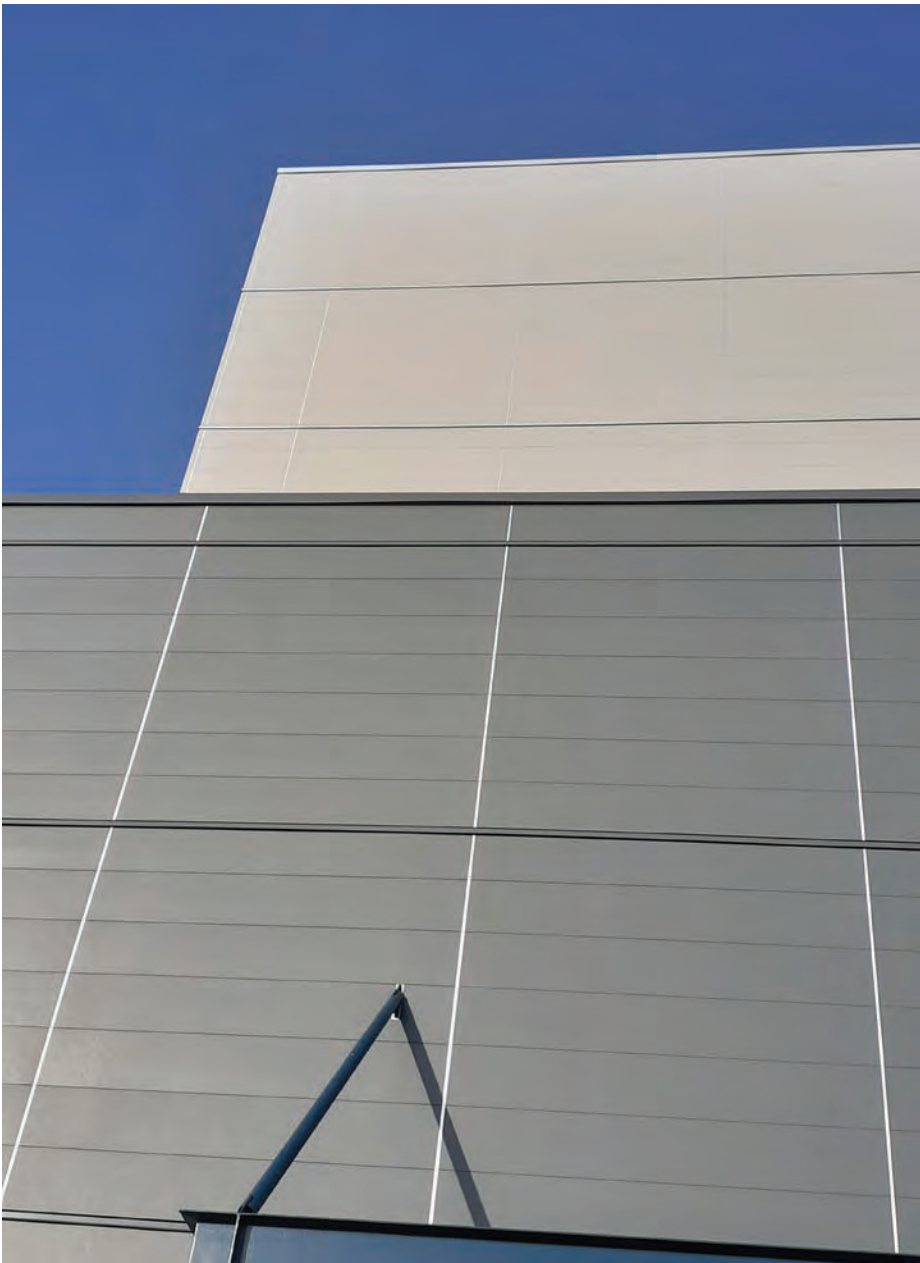
Conventional Caulked Joint



Vertical Application



Metal Trim Application (Third party provided)

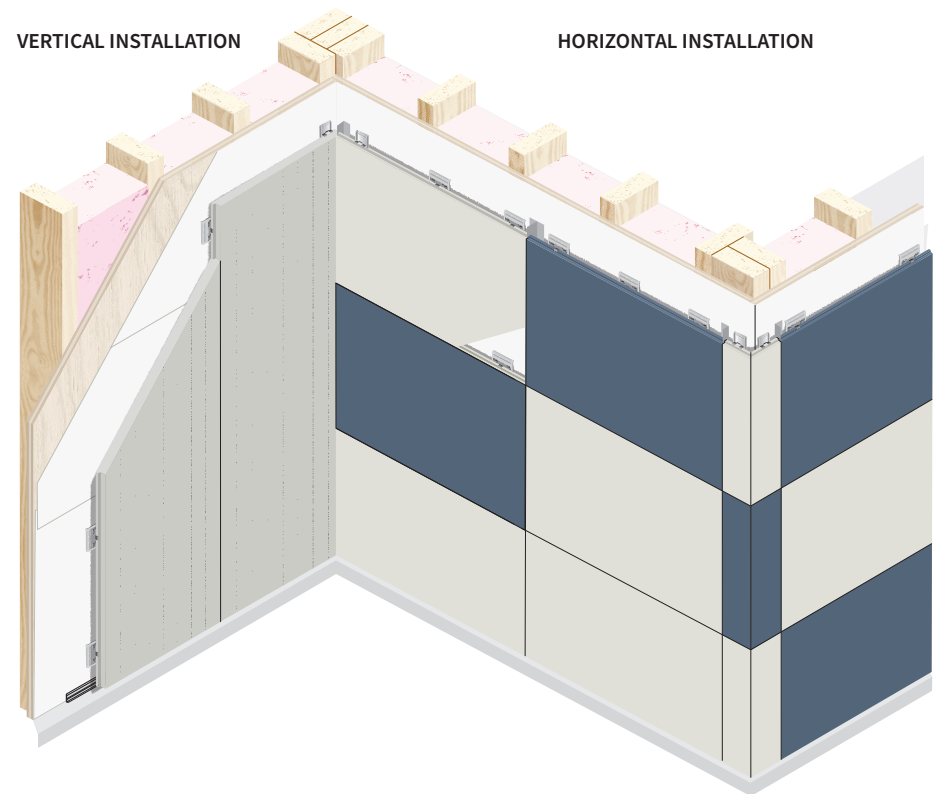


Horizontal and Vertical Mixed Application

Horizontal application

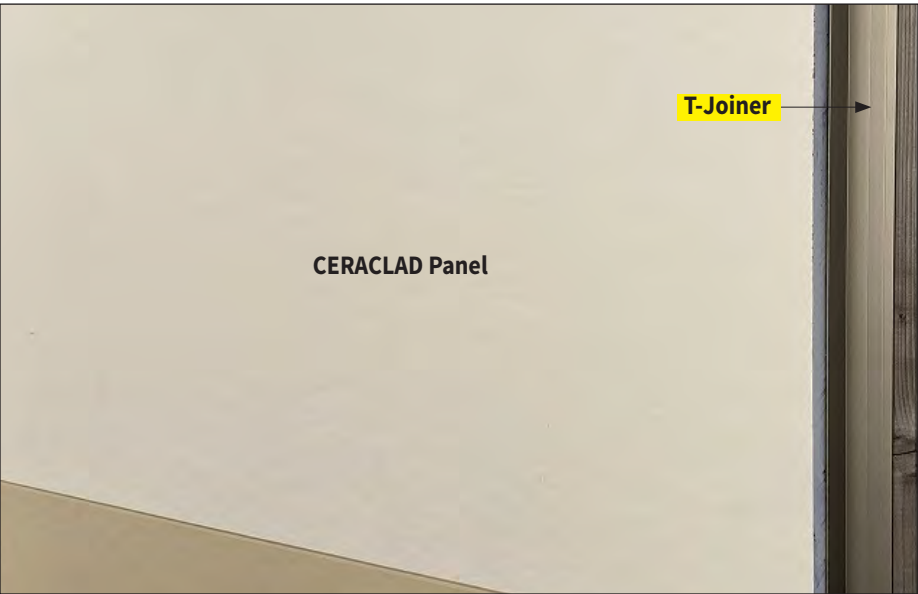


Vertical application

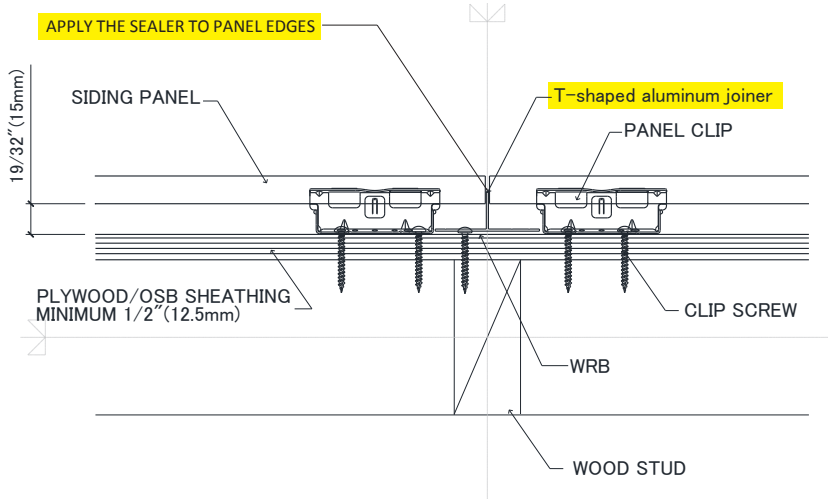


Joining Methods

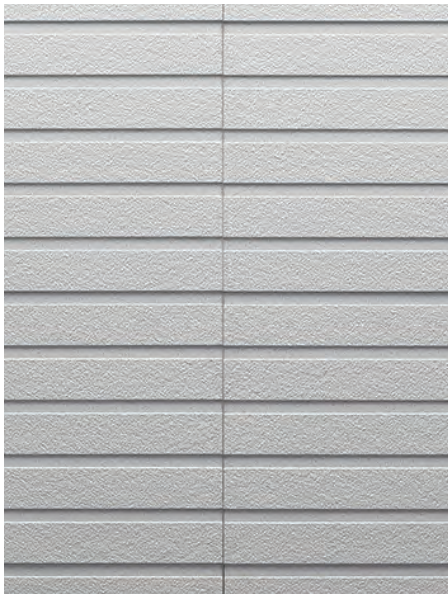
VERTICAL JOINER



T-JOINER



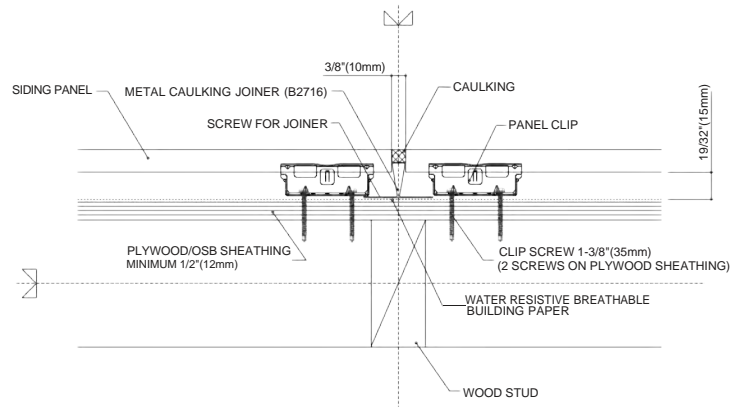
NEW Caulk-Free T-joint



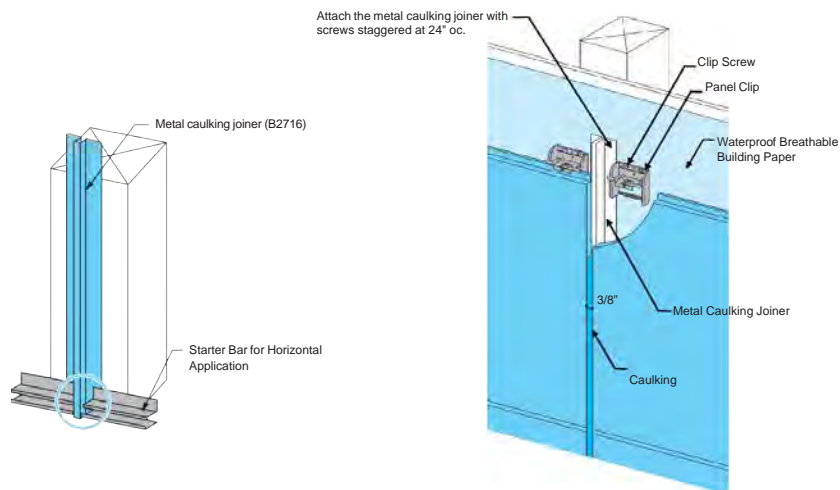
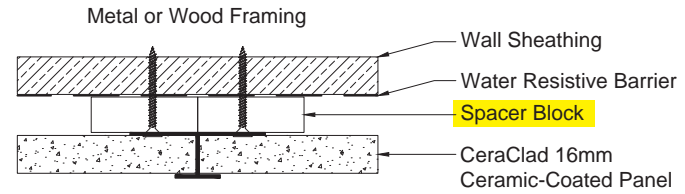
Conventional Caulked Joint



CAULKING JOINER



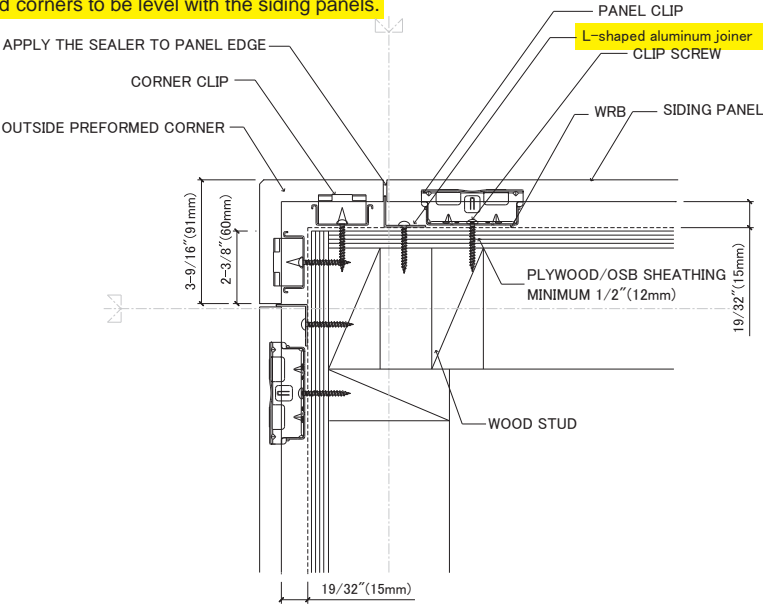
METAL TRIM (Third party provided)



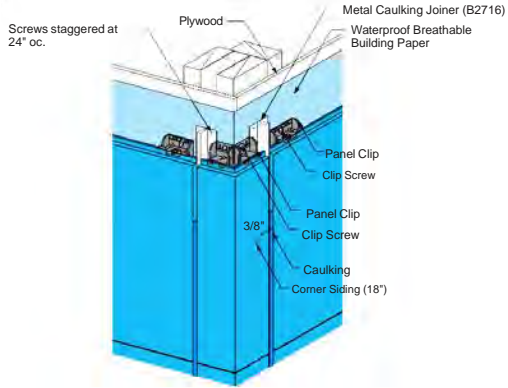
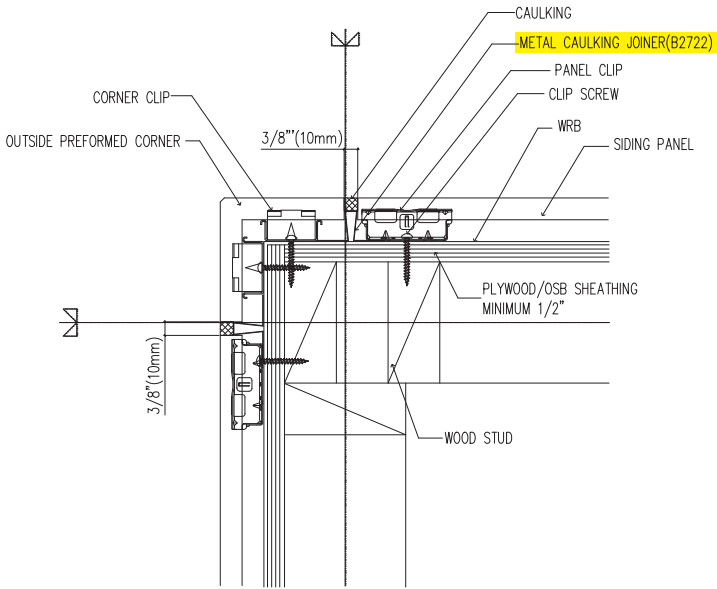
Outside Corner for Horizontal Application

L- SHAPED JOINER

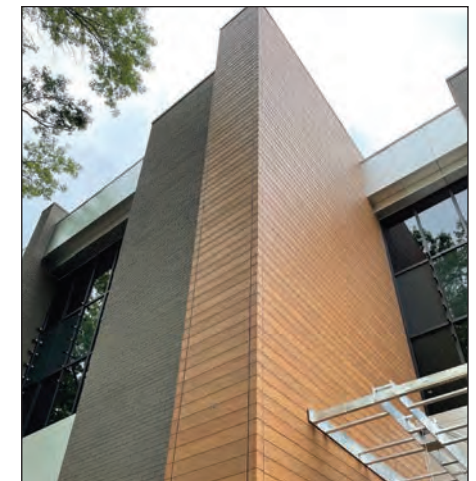
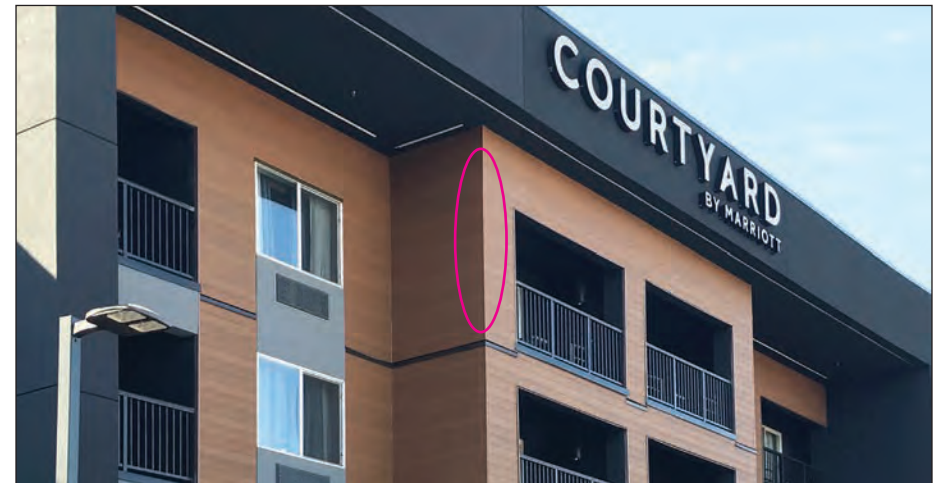
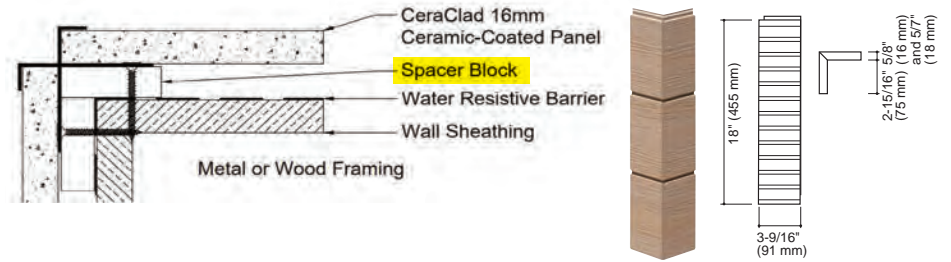
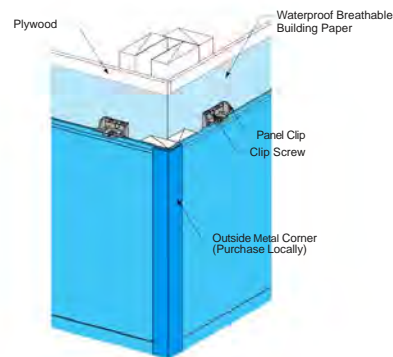
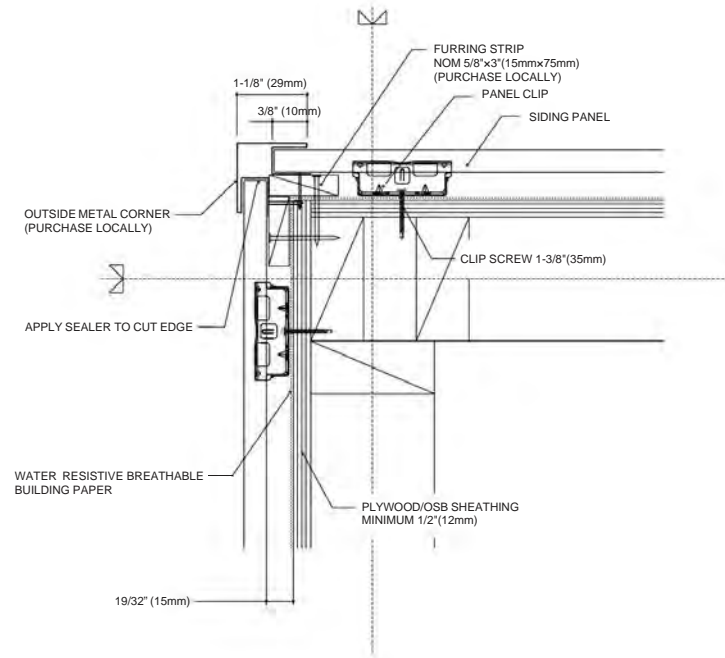
Install preformed corners to be level with the siding panels.



CAULKING JOINER

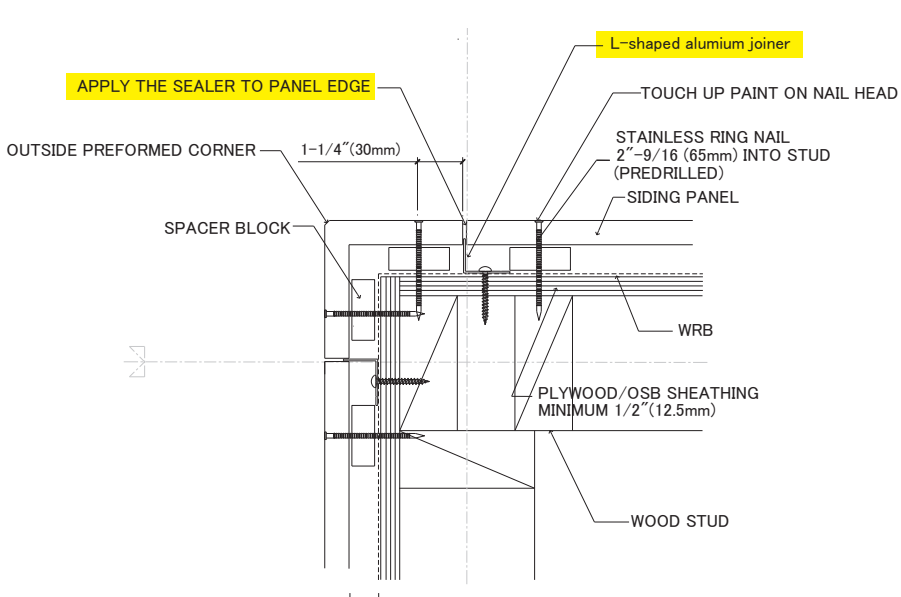


METAL TRIM (Third party provided)

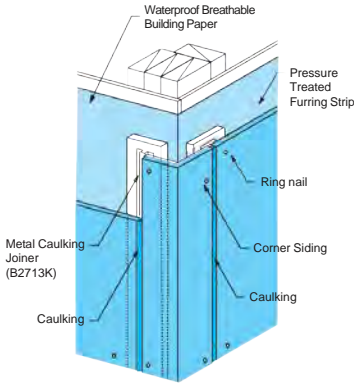
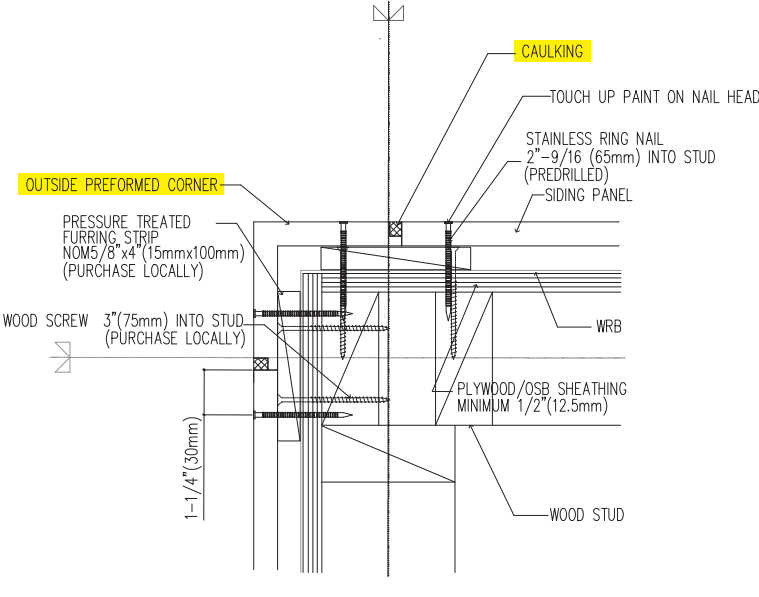


Outside Corner for Vertical Application

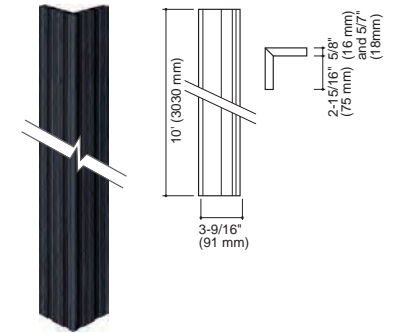
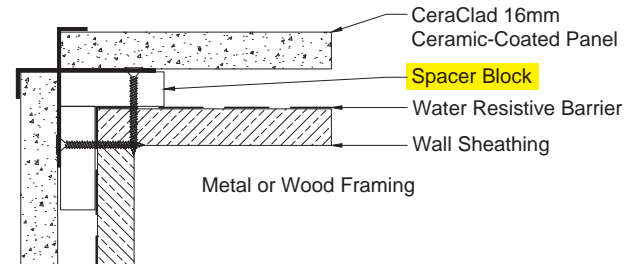
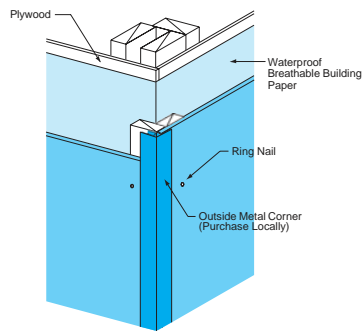
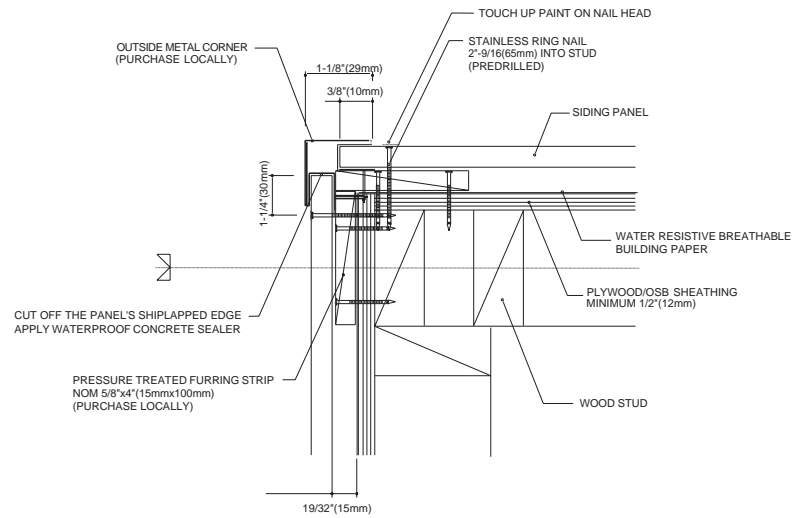
L- SHAPED JOINER



CAULKING JOINER

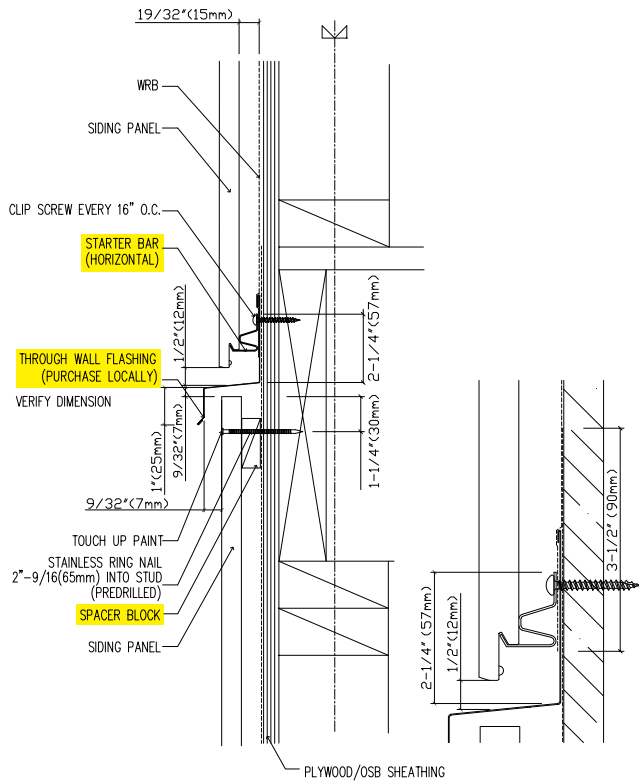


METAL TRIM (Third party provided)

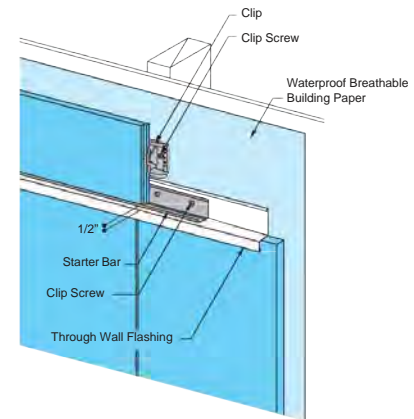
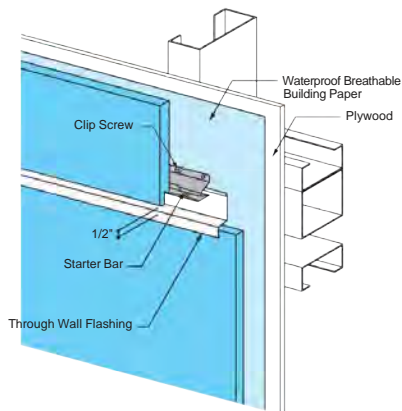
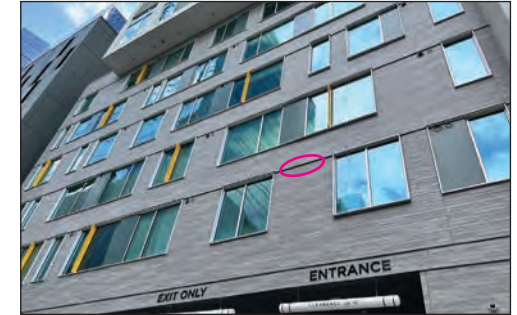
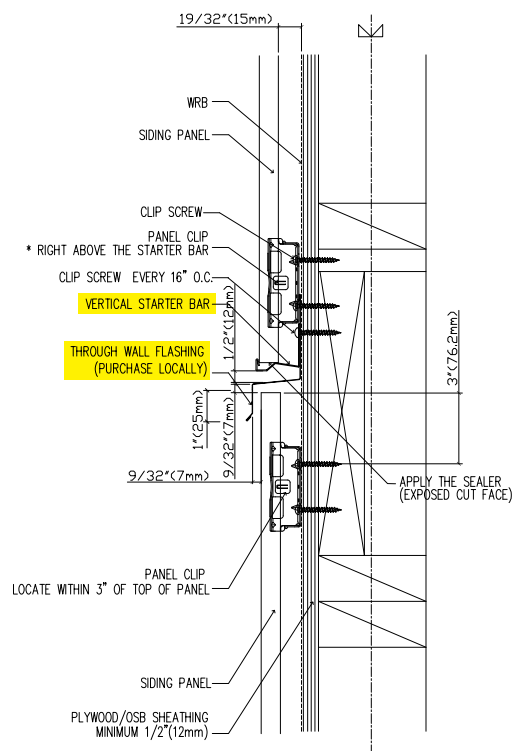


Through Wall Flashing Application (Third party provided)

HORIZONTAL APPLICATION

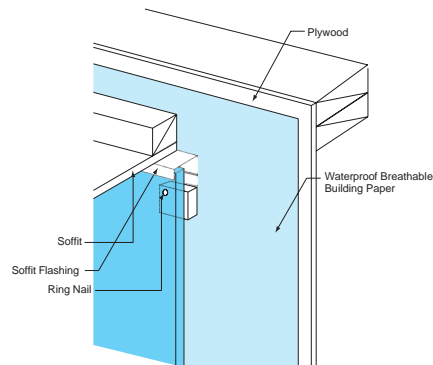
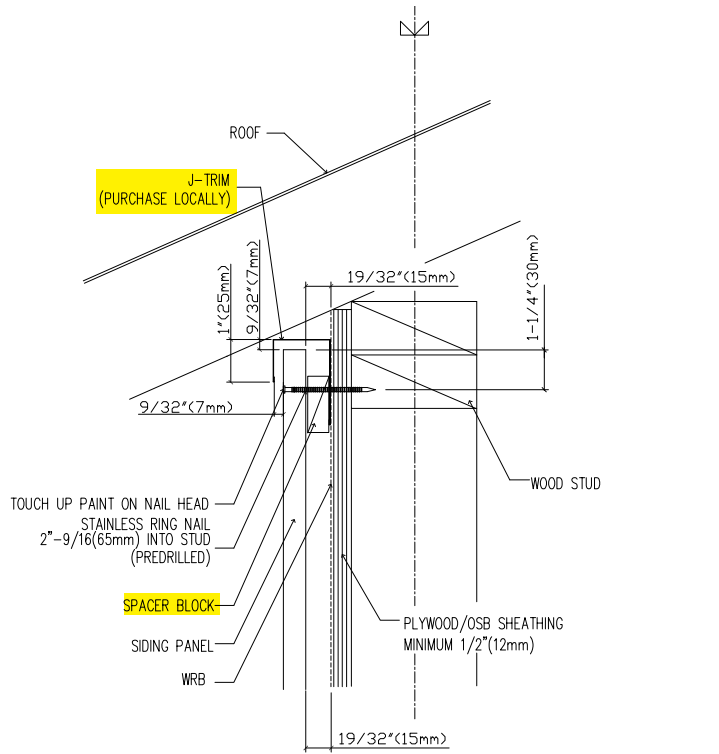


VERTICAL APPLICATION

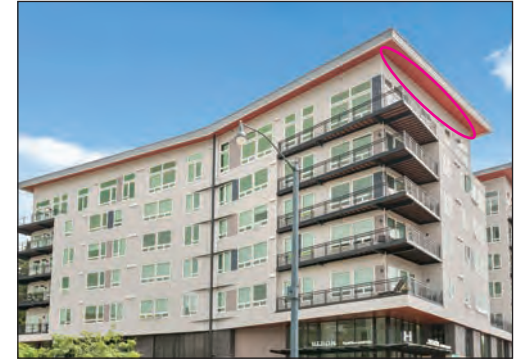
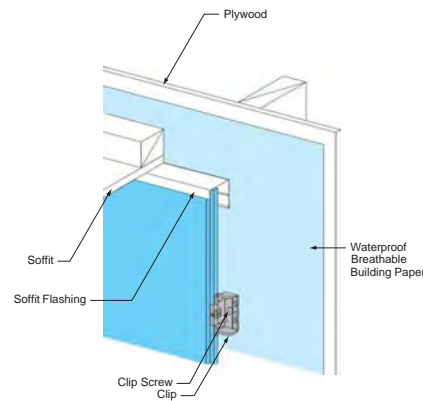
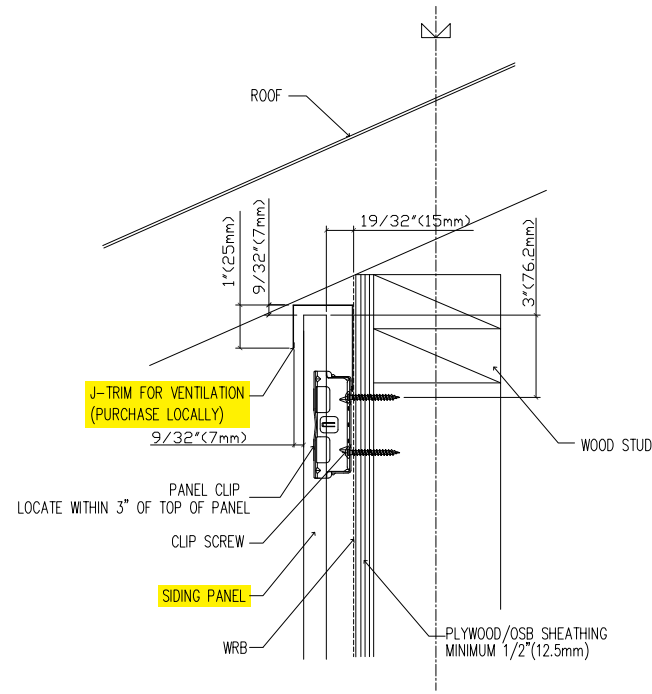


Top of Wall

HORIZONTAL APPLICATION

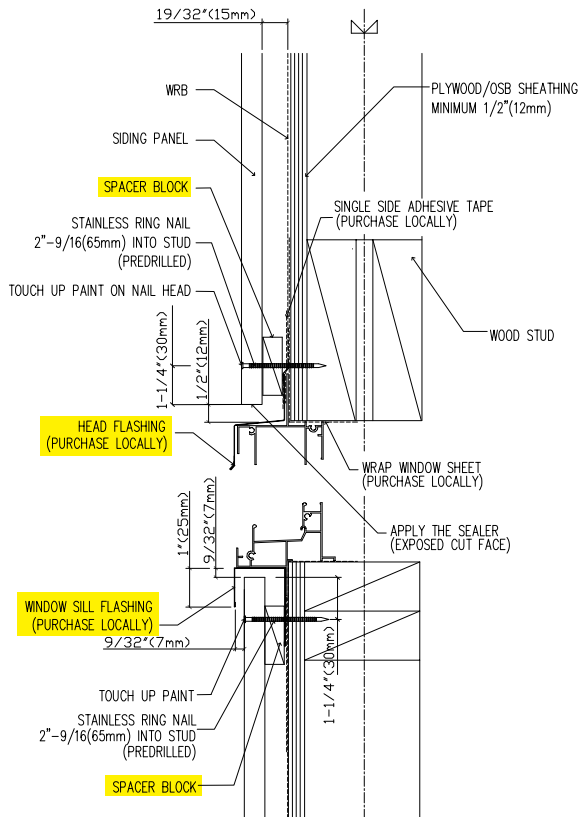


VERTICAL APPLICATION

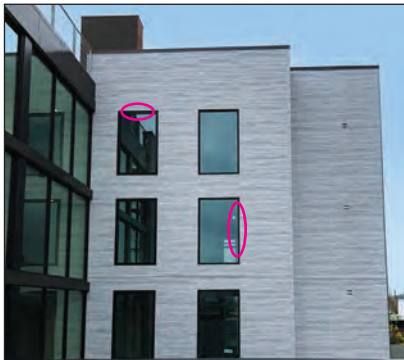
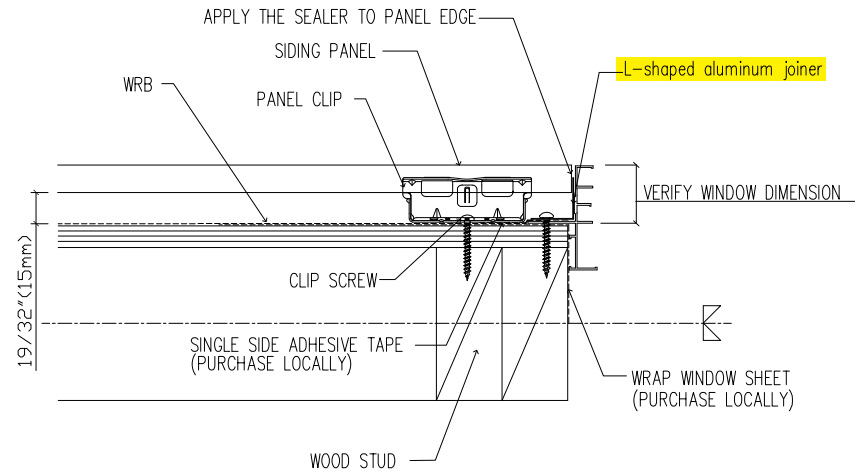


Around Openings / Horizontal Application

HEAD AND SILL

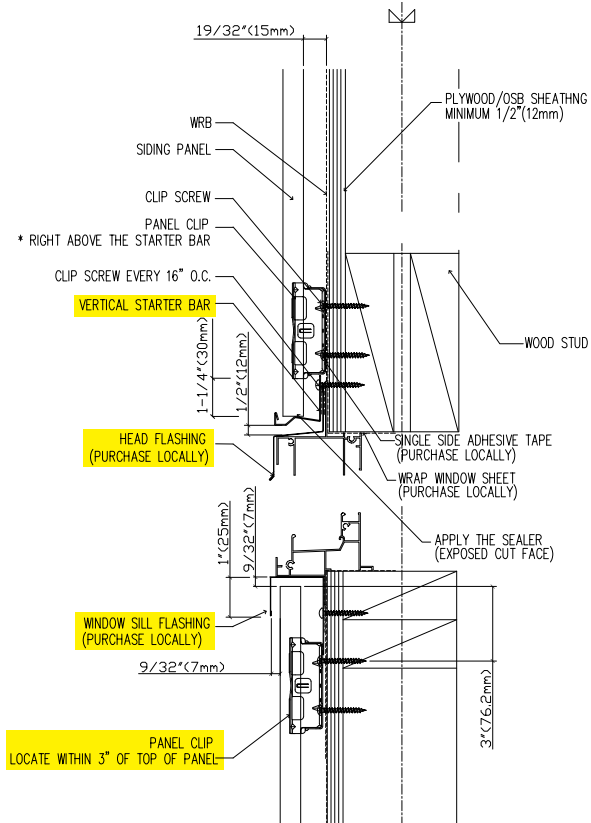


JAMS

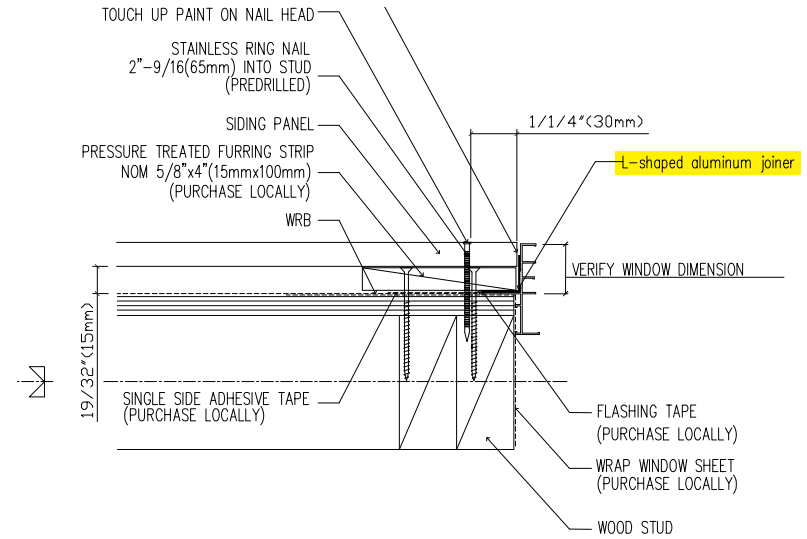


Around Openings / Vertical Application

HEAD AND SILL

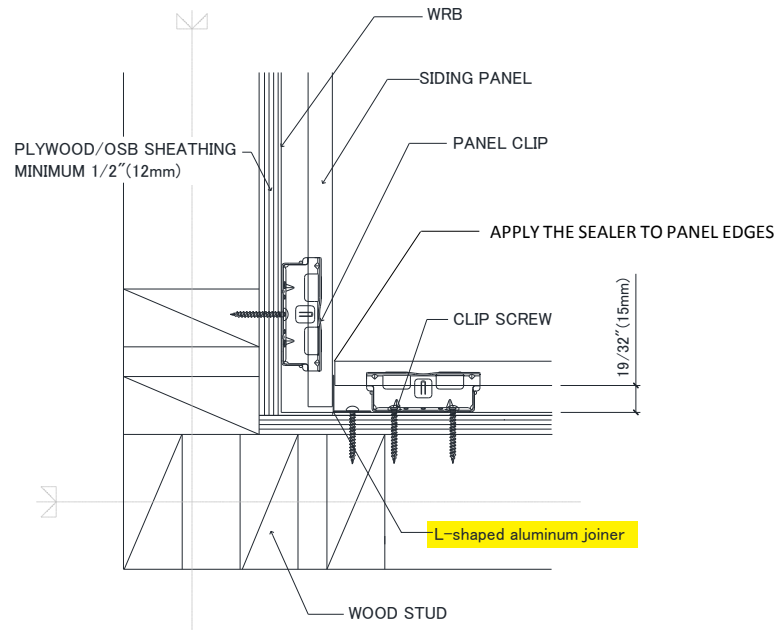


JAMS

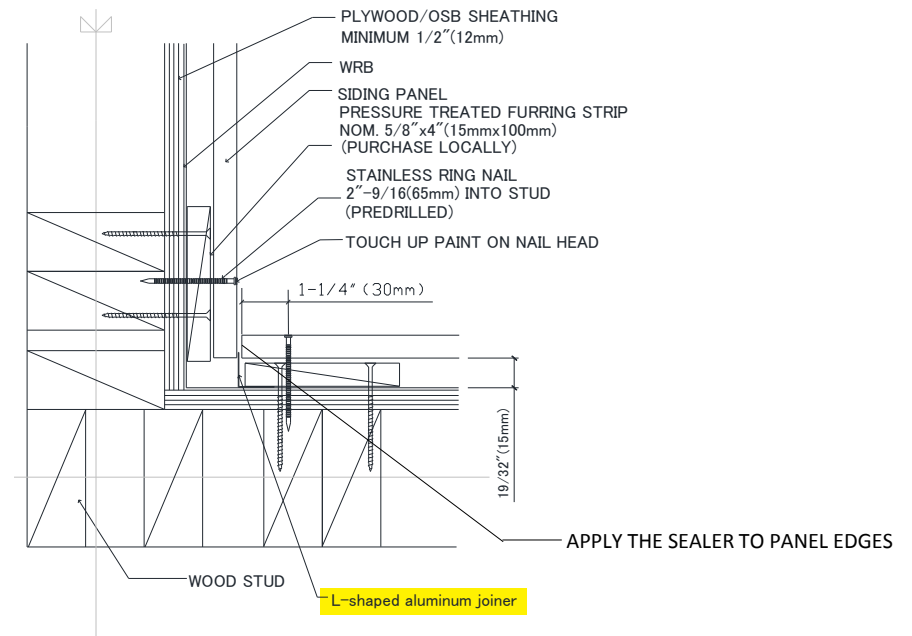


Inside Corner

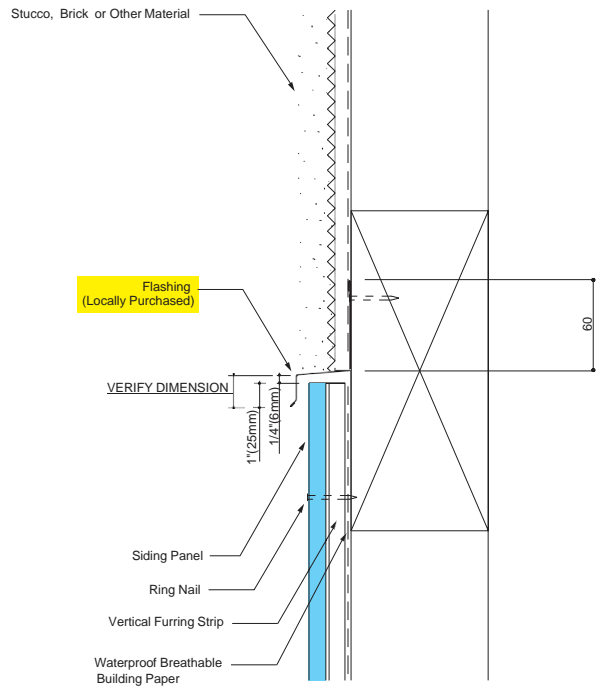
HORIZONTAL APPLICATION



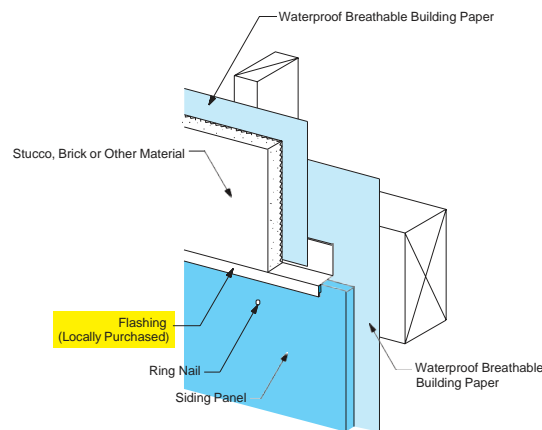
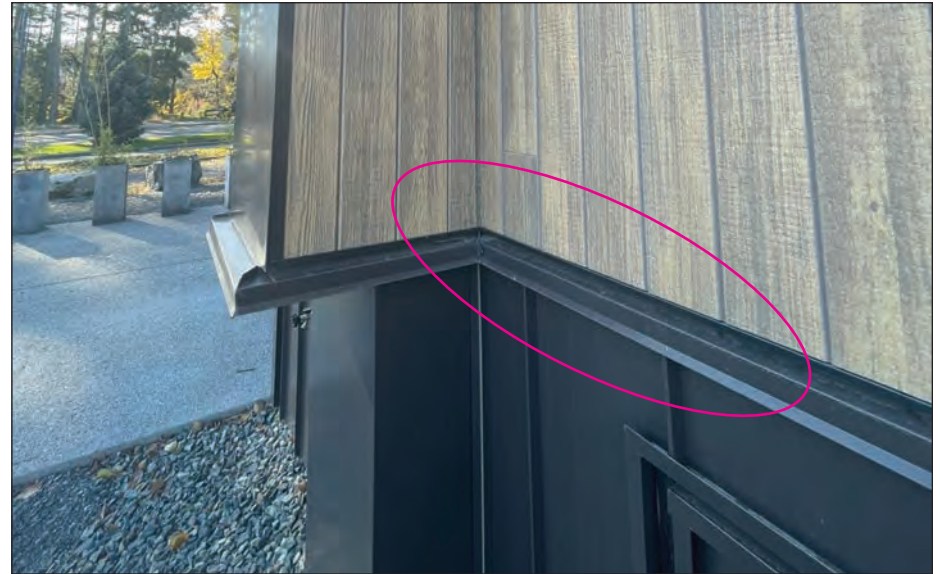
VERTICAL APPLICATION



Junction With Other Material / Horizontal



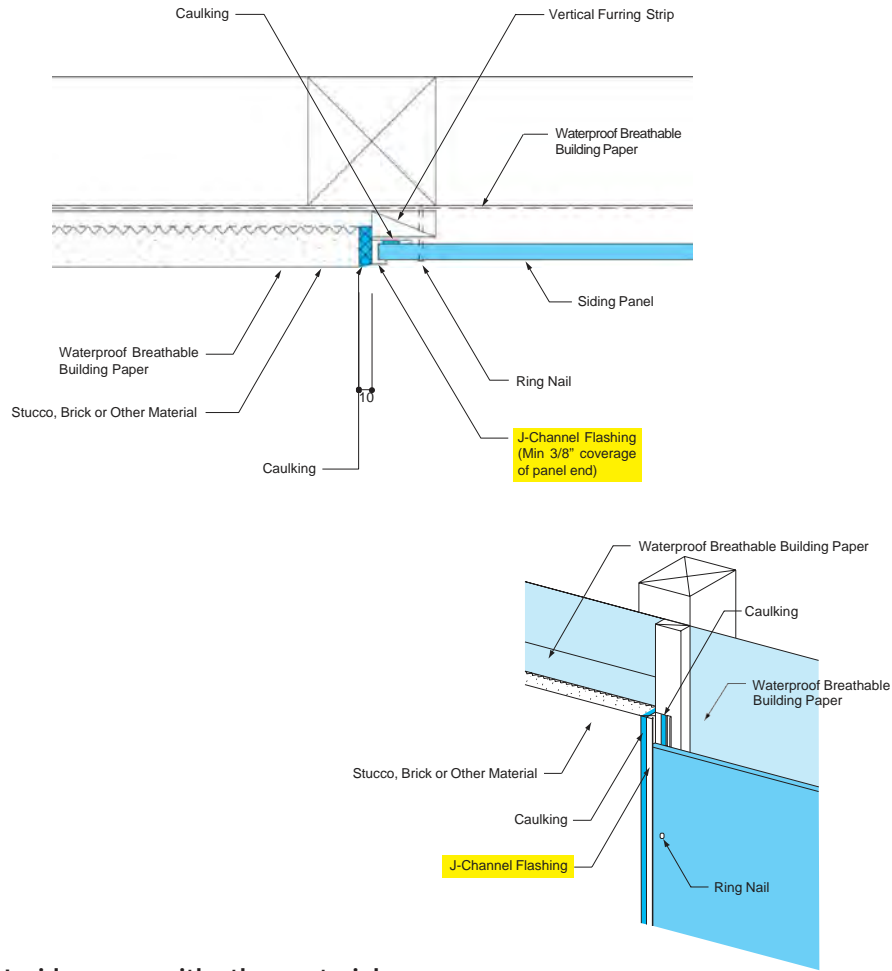
With metal panel



With stucco



Junction With Other Material / Vertical



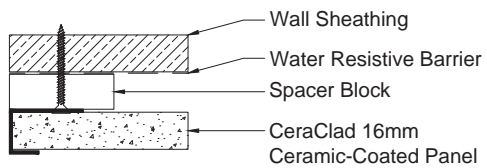
With brick



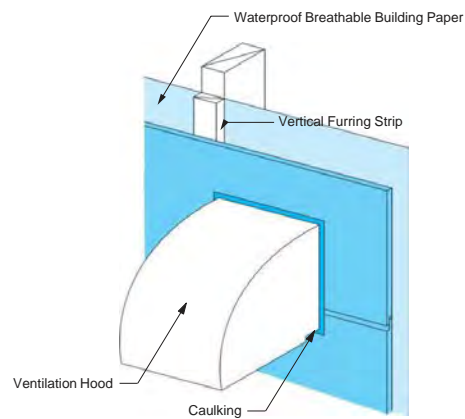
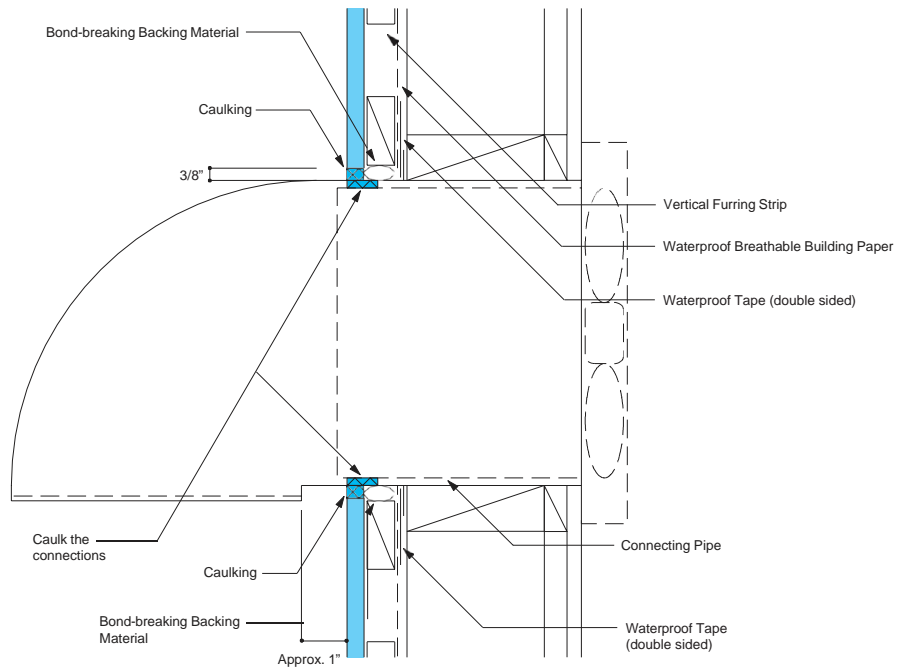
With stucco



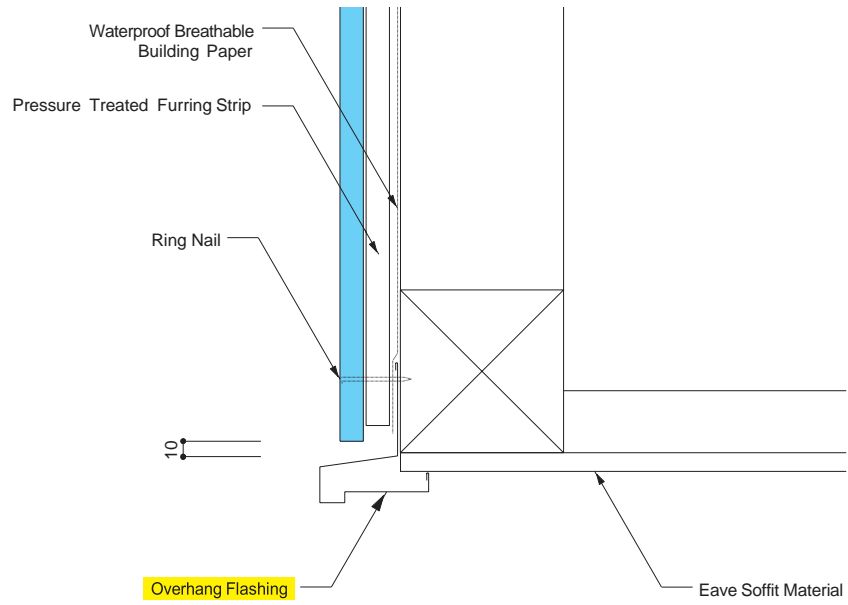
Inside corner with other material



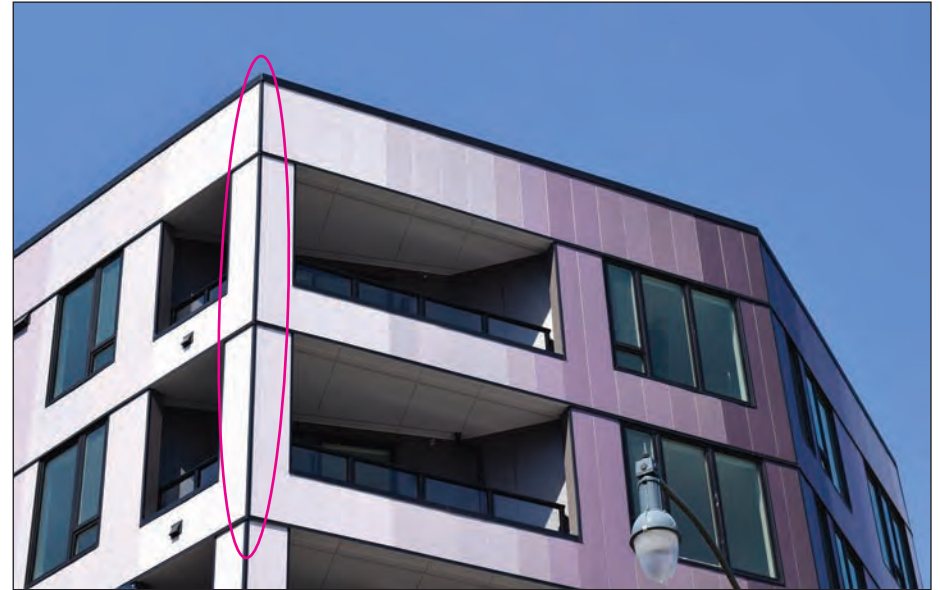
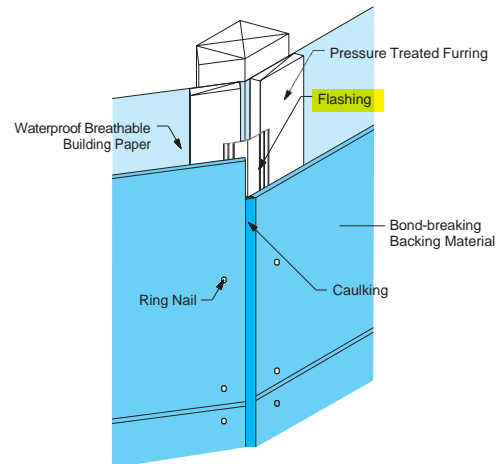
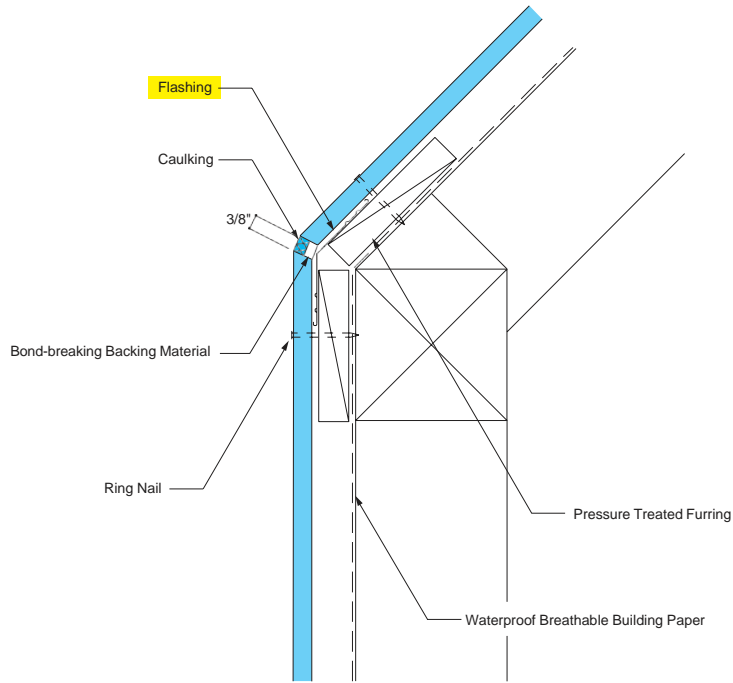
Around Ventilation Ducts



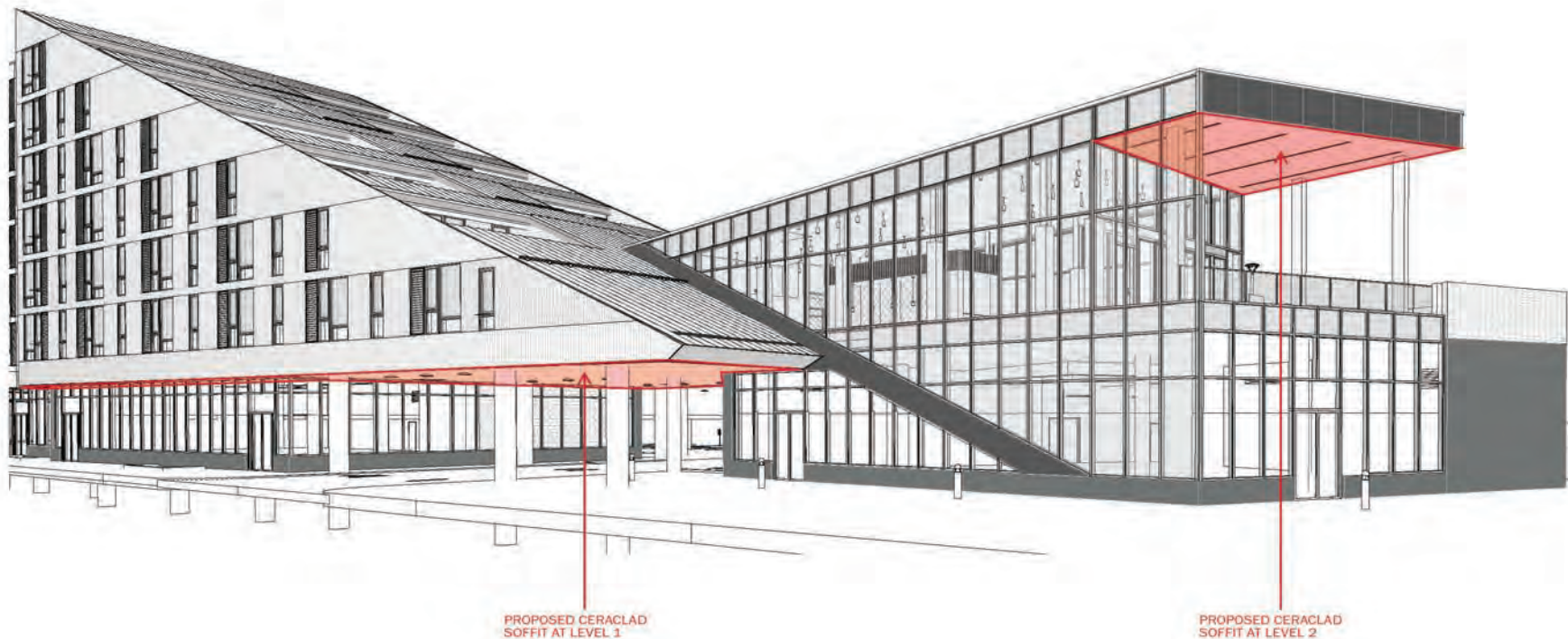
Overhangs



Obtuse Angle Installation



Soffit Design and Installation Standards



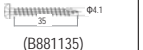
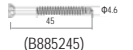
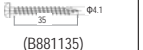
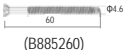

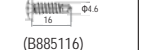
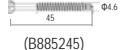
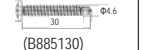
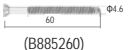
SCOPE

Item	Scope
Structure	Wood, Steel
Applicable portion	Eave <ul style="list-style-type: none"> The construction surface must be flat. Both sloped and horizontal eaves are acceptable
Target Products	All CERACLAD products
Design Pressure	Equivalent to CERACLAD for exterior wall – see ESR 1627
Application method	Vertical or Horizontal
Fixing method	① Panel clip + Face screw ② Long clip + Face screw

SUBSTRATE STANDARDS

		Wood	Steel
Stud	Way to construct	Perpendicular to the direction of panel installation	
	Interval	16" (400mm) or less	
	Dimension	2" x 4", 2" x 6"	3-5/8" x 1-5/8" 18GA ~ 16GA
	reinforcement	Appropriate implementation under the responsibility of the project engineer. (The substrate must be constructed to support the weight of the panels.)	
Sheathing		None	None
		Plywood/OSB (1/2")	Glass Mat Gypsum (t 5/8")
		Plywood/OSB (1/2") + Glass Mat Gypsum (5/8")	Glass Mat Gypsum (t 5/8") x 2
Substrate Flatness	2mm or less		
Ensure ventilation of walls	Appropriate implementation under the responsibility of the project engineer.		

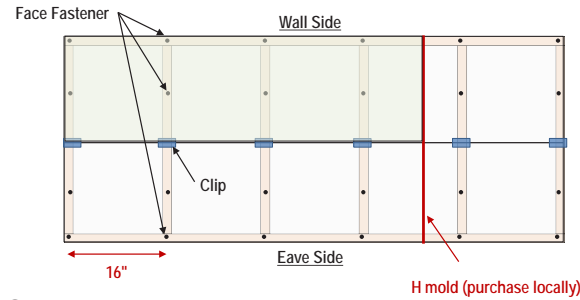
PANEL INSTALLATION STANDARDS

Structure	Sheathing	Screw (Product No)	
		For panel clip	For face fastener
Wood	None	 (B881135)	 (B885245)
	Plywood/OSB (1/2")	 (B881135)	 (B885260)
	Plywood/OSB (1/2") + Glass Mat Gypsum (5/8")	 (B88553)	Purchase locally
Steel	None	 (B885116)	 (B885245)
	Glass Mat Gypsum (5/8")	 (B885130)	 (B885260)
	Glass Mat Gypsum (5/8") x 2	Purchase locally	Purchase locally

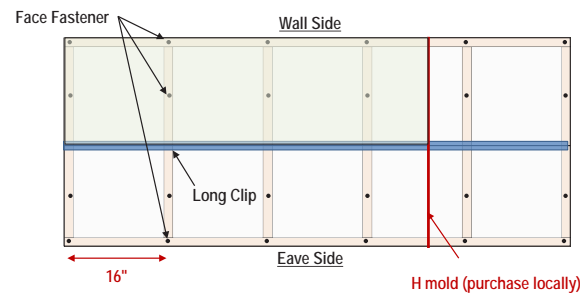
	Repair Putty	Repair Paint
Product No	B4901	Different for each Product
Product		

HORIZONTAL APPLICATION (parallel to wall)

① Panel clip + Face screw

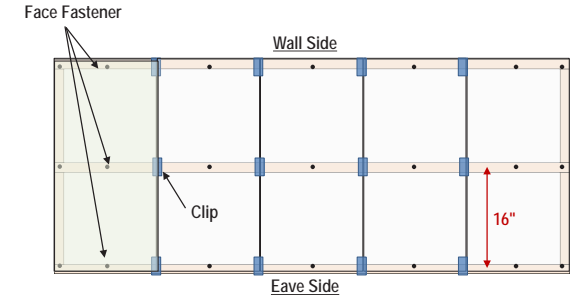


② Long clip + Face screw

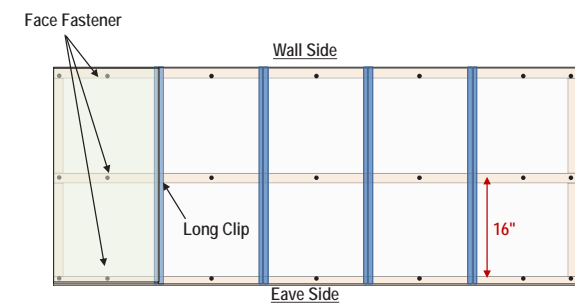


VERTICAL APPLICATION (perpendicular to wall)

① Panel clip + Face screw



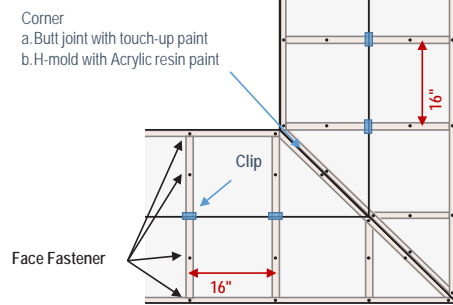
② Long clip + Face screw



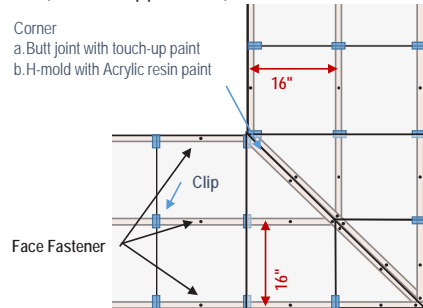
Soffit Design and Installation Standards

INSTALLATION OF CORNER SECTION

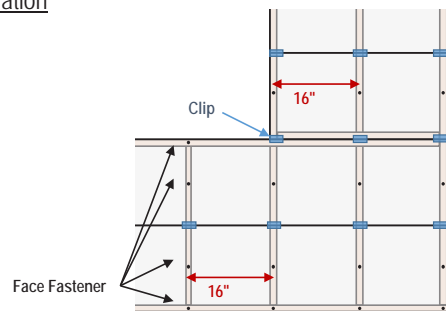
Diagonal installation (horizontal application)



Diagonal installation (vertical application)

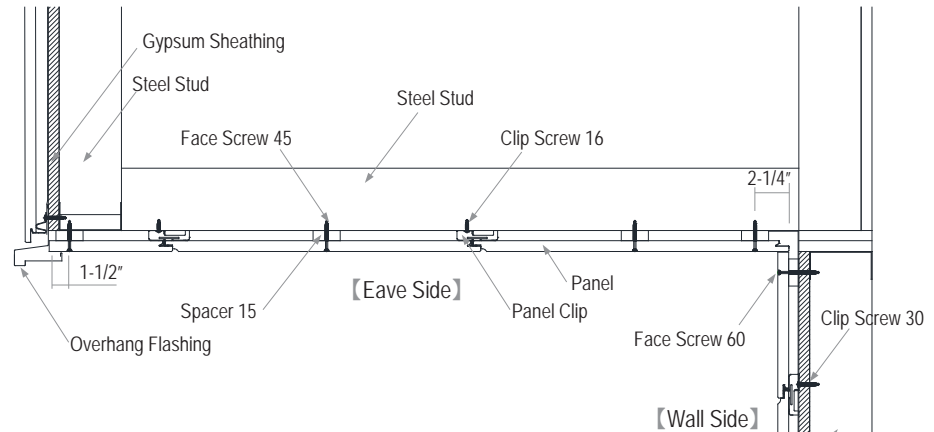


Parallel installation

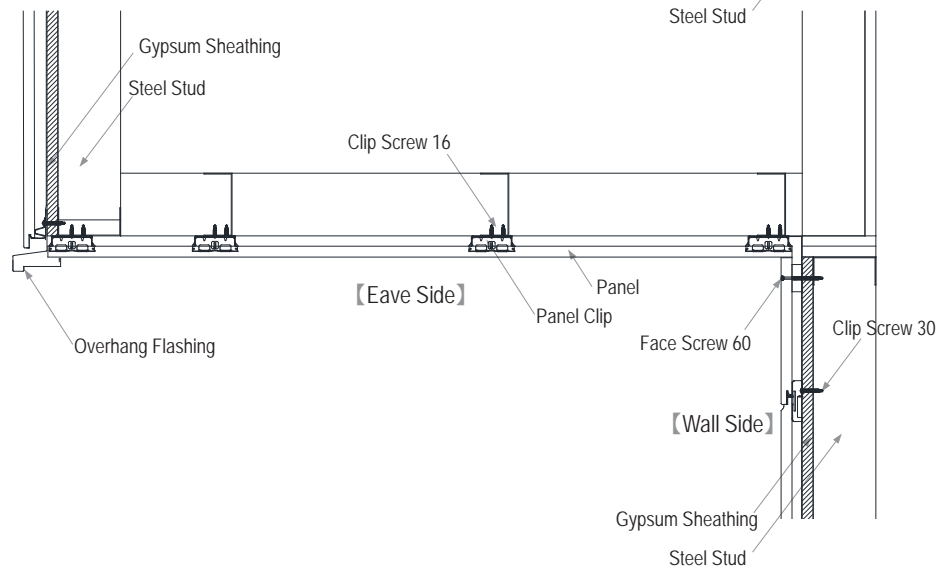


DETAIL DRAWING

Horizontal application (wall : horizontal application)

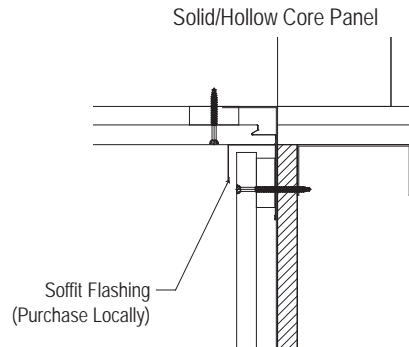


Vertical application (wall : horizontal application)

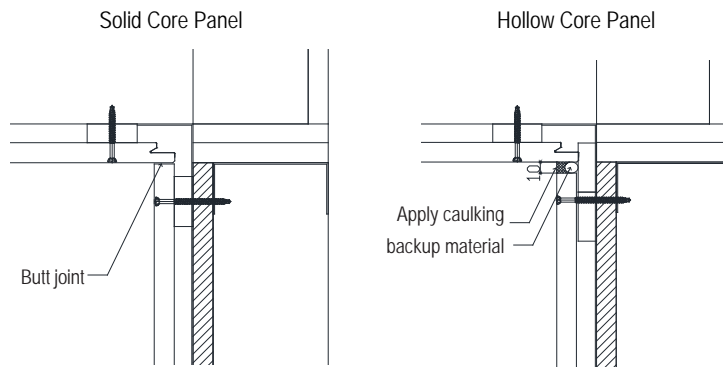


DETAIL DRAWING

① With soffit flashing



② Without soffit flashing



Unique Application Example

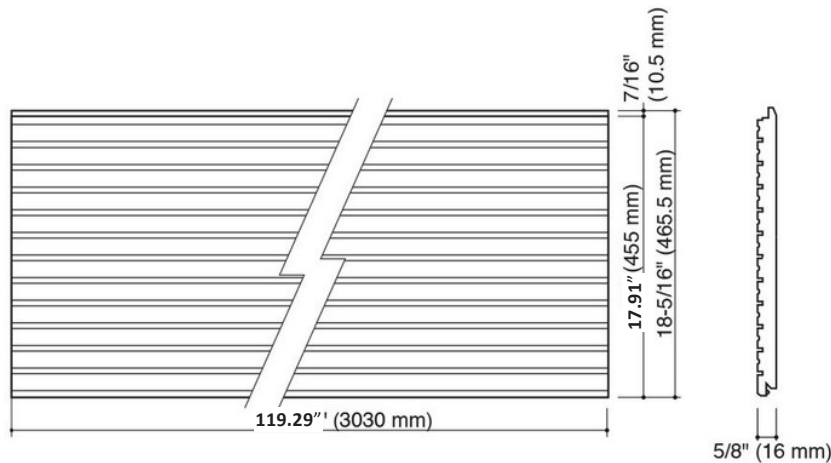




Layout Guide

CERACLAD PANEL DIMENSIONS

Product	Core	Width	Length	Height	Weight
CERACLAD	Solid	16mm (nom. 5/8")	3030mm (nom. 10")	455mm (nom. 18")	24-27kg (53-60 lbs)
		Actual 0.63"	Actual 119.29'	Actual 17.91"	



Notes

- Much like dimensional lumber, Ceraclad panels have nominal and actual sizes.
- For the US market, the nominal Imperial dimension is 18 inches wide by 10 feet long.
- The actual dimension as manufactured in Metric is 455 mm wide by 3030 mm long.
- The actual Imperial size is 17.91 inches by 119.29 inches, slightly smaller than the nominal size.
- Be sure to work with the actual dimension in CAD programs to ensure panel layout is consistent with fenestration dimensions, floor heights, and other landmarks.

CERACLAD SYSTEM LAYOUT

- Ceraclad is a sequentially stacked, shiplap edge panel system with a fixed module height of 17.91" when installed in a horizontal orientation, and a fixed height of 119.29" when installed in a vertical orientation.
- The shiplap edge runs the long panel dimension, and the short panel dimension is square cut.

Example of arrangement from center of the building

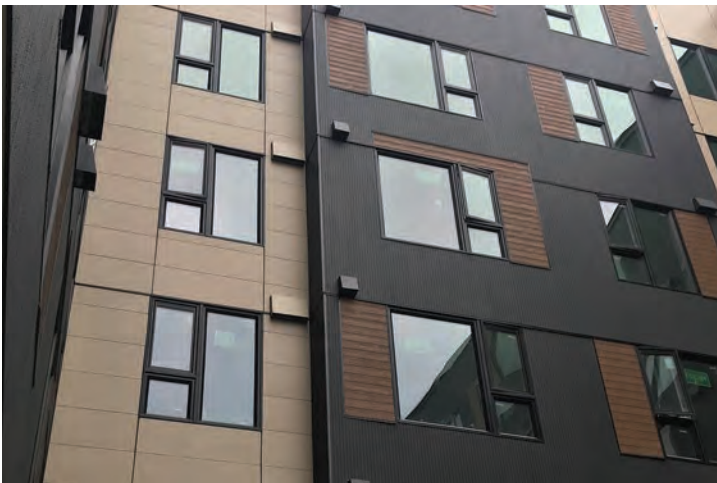


- The fixed module panel height will articulate a horizontal panel joint every 455mm or 17.91" vertically.
- Consider making adjustments at bottom of the wall or adding horizontal flashing breaks to align joints with window/door opening or other elevation landmarks if desired.
- Ripping horizontal panels (cutting off the top shiplap) within a vertical run in order to align a panel joint, color, or texture change with a window, door, or other elevation landmark requires face fastening the top edge of the ripped panel, a Z-flashing to cover the top edge of the ripped panel, and a starter bar above the flashing to start the next horizontal panel run.

- The typical detail for panel layout at a window head is a notched cut at the jamb/head intersection:



- If desired, an option for avoiding a notch-cut around a window or other opening is to run a continuous vertical joint at the jambs:

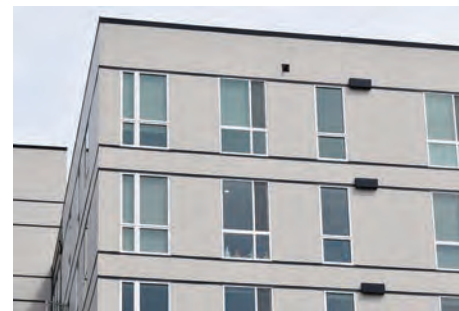


VERTICALLY-ORIENTED PANEL LAYOUT TIPS:

- The fixed module panel height will articulate a horizontal flashing/ panel joint every 3030mm or 119.29” horizontally with a full-size (uncut) panel.
- Vertically-oriented panel runs must all be the same height with flashing over the top edge of the run in the panel field.



- Floor heights greater than 119.29” will generally require an additional band for coverage between floors.



- Vertically-oriented panel width is 17.91”
- Clip attachment does not align with the required 16” o.c. stud layout.
- Clips must be attached to WSP, or horizontally oriented steel furring.

Warranty

KMEW USA, Inc. provides warranty coverage for its Ceramic Coating Siding, CREATIV™ Custom Color Siding, and Acrylic Finish Product. The warranty extends to the purchaser and transferees of the product installed as external walls.

30 Year Limited Warranty: The Product is warranted against structural cracking, rot, delamination, and damage caused by termites for 30 years under normal use.

20 Year Limited Warranty: The Ceramic Product finish is warranted to retain its color, luster, and integrity, with limited color fade and resistance to peeling, structural cracking, and chipping for 20 years under normal use.

15 Year Limited Warranty: The CREATIV™ Product and Acrylic Finish Product finish are warranted against significant peeling, structural cracking, and chipping for 15 years under normal use.

Note: The warranty period starts from the date of purchase and is applicable only to installations within the United States and Canada. Proper storage, installation, and maintenance as per the CERACLAD installation manual are required.

WARRANTY DISCLAIMER SUMMARY:

KMEW provides the only warranty for the Product, and all other warranties, including implied warranties of merchantability or fitness for a particular purpose, are disclaimed, except where required by consumer product warranty law or by usage of trade or course of dealing. The duration of any applicable warranties is limited to the first elapsed warranty period or as permitted or required by applicable law.

KMEW will not be liable for any incidental, special, indirect, consequential, or other damages arising from non-delivery or the use, misuse, or inability to use the Product, or from defects in the Product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the limitation may not apply.

No other warranty is made by the manufacturer or seller, or by operation of law or usage of trade or course of dealing, regarding the Product or its installation, storage, handling, maintenance, use, replacement, or repair.

This Warranty provides specific legal rights, and additional rights may vary from state to state.

For more detailed warranty information, please refer to the original warranty documentation provided by KMEW USA, Inc.



Resources

Ceraclad technical email: technical@ceraclad.com

Ceraclad website Technical Information:

<https://ceraclad.com/resources/technical-information>



www.ceraclad.com



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