

CAMOBORD™41



INSTALLATION INSTRUCTIONS

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1.0 **Storage, Handling, and Installation Precaution Recommendations**

- 1.1 Always keep stored CAMOBOARD™ products tarped or covered to protect from the weather. If possible, store indoors. Store CAMOBOARD elevated from the ground and protected from moist conditions. Ensure that CAMOBOARD is maintained flat and level in storage.
- 1.2 When stored outdoors, all materials should be protected from exposure to direct sunlight using an opaque light-colored tarp or the original packaging. Unwrapped materials should be carefully rewrapped.
- 1.3 **WARNING:** Progressive Foam Technologies, Inc. (PFT) insulating sheathing and fanfold products are treated with a flame retardant; however, all foam plastic insulation will ignite if exposed to a heat source of sufficient heat and intensity. Protect foam plastic insulation from exposure to open flame or other ignition sources during shipment, storage, and installation.
- 1.4 **Installation Guidelines:** To protect CAMOBOARD products once installed and to ensure they return to their original dimensions after thermal expansion, follow these guidelines until cladding is installed over CAMOBOARD
 - 1.4.1 Eliminate or cover any surfaces reflecting sunlight onto CAMOBOARD products or shield the affected areas.
 - 1.4.2 Note: Faded printing on CAMOBOARD is normal and does not affect performance.
 - 1.4.3 Make sure all butt joints are tightly fitted for the highest performance achievement.

2.0 **Useful Tools and Materials**

- 2.1 **Tape and Flashing:**
 - 2.1.1 For Water Resistive Barrier [WRB] applications, use PFT Flashing and Seam Tape or approved AAMA 711 or AC 148 approved tapes or flashings.
- 2.2 **Approved Fastener Types.**
 - 2.2.1 Minimum of 0.113" x 2-3/8".
 - 2.2.2 15-degree coil nails with a min of a 3/8" head.

3.0 Product Description

CAMOBORD Structural Insulated Sheathing is a structural wall sheathing comprised of a proprietary foam plastic insulating sheathing adhered to a wood structural panel and may be used as wall sheathing for multi-family or residential construction.

- 3.1 AVAILABLE SIZES: 4ft x 8ft, 4ft x 9ft sheets.
- 3.2 NOMINAL THICKNESS: CAMOBORD is available in R3.5, R5.5, and R8.0 insulating values.
 - 3.2.1 The graphite-enhanced foam is 0.59", 1.02", and 1.55" thick, respectively. Total nominal thicknesses for CAMOBORD™ panels are:
 - 3.2.2 1.00", 1-1/2", and 2.00" thick with 7/16" OSB as the structural backer.
- 3.3 Installation accuracy and efficiency with guide dashes and guidelines on film facers.

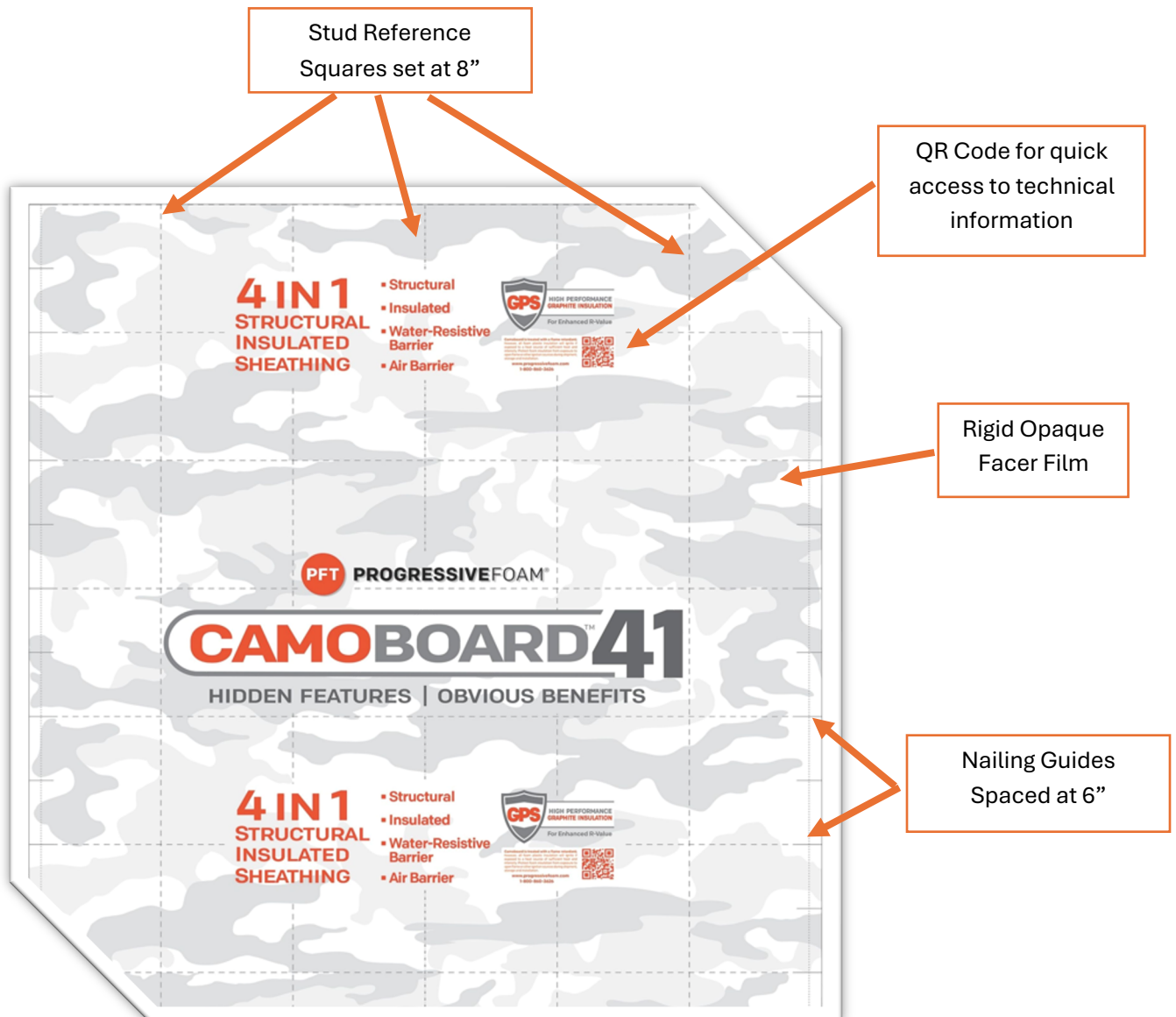
****See CAMOBORD FILM Description and Guide in Section 5.0 for more film details.***

4.0 Features and Benefits

- 4.1 FEATURES: CAMOBORD Premium Graphite Polystyrene Versatile Rigid Insulation is a film-faced, graphite-enhanced foam that provides continuous insulation, is a water-resistant barrier [WRB], and serves as an air barrier.
 - 4.1.1 CAMOBORD products with Graphite Polystyrene (GPS) deliver R5 per nominal inch.
 - 4.1.2 Film-facers feature rigidity and durability.
 - 4.1.3 White facer material helps mitigate heat build-up and moisture damage.
 - 4.1.4 Installation accuracy and efficiency with guide dashes and guidelines on film facers.
 - 4.1.5 Tough on the job site.
- 4.2 BENEFITS:
 - 4.2.1 Provides continuous insulation, with reduced thermal breaks.
 - 4.2.2 Increases the R-value of the wall assemblies that cannot be achieved with cavity insulation alone.
 - 4.2.3 Acts as a water-resistant barrier - eliminates the need for house wrap when the joints are sealed and taped. This reduces air leakage and ensures that moisture transmission through the cladding will drain to the outside.
 - 4.2.4 Serves as a direct replacement of wall sheathing panels in braced wall construction.

5.0 FILM Description and Guide

CAMOBORD Film is a white opaque 1.5mil Rigid Polypropylene Material designed to reduce moisture penetration, block UV degradation of the insulation, and provides details helping guide installation for easy placement.



6.0 Installation Instructions: CAMOBOARD Water Resistive Barrier (WRB) Application

The instructions below are for a typical installation above grade. CAMOBOARD is designed to be used in place of standard house wrap but can also be used in conjunction with house wrap.

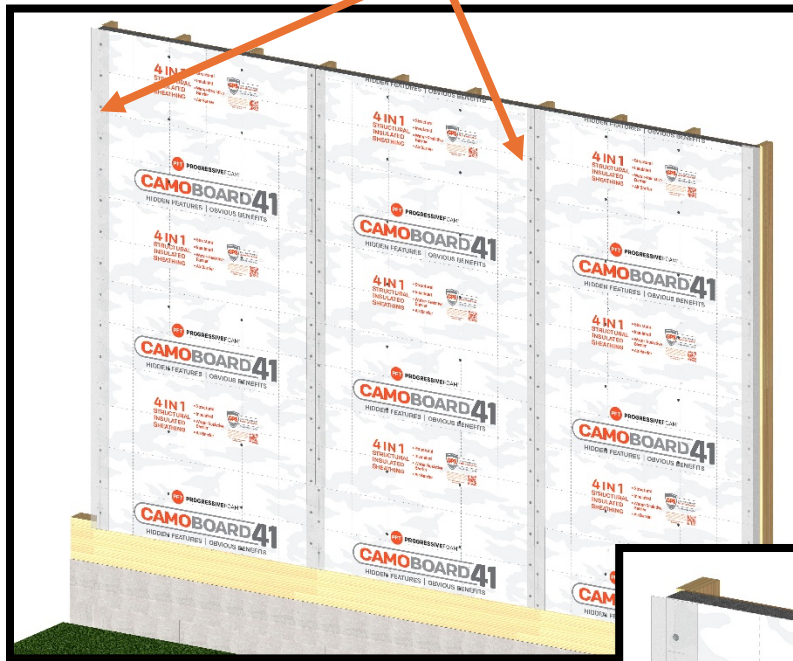


- 6.1 Fasten the CAMOBOARD to the wall substrate:
 - 6.1.1 CAMOBOARD is fastened directly to the wooden studs and framing members of a wall with a nominal thickness not less than 2" (51mm) and spaced a maximum of 24" (610mm).
 - 6.1.2 CAMOBOARD must be installed with the length of the panels parallel to the wall framing (typically vertical) and all panel edges supported by framing or blocking.
 - 6.1.3 CAMOBOARD sheathing joints shall be tightly butted at framing members, and a single row of fasteners must be applied to all panel edges into the framing behind.

6.1.4 To maintain the WRB protective status, the joints and seams MUST be taped with approved flashings.

6.1.4.1 Nail penetrations in the field of the panel, NON-Seam fastening, do not need to be taped or sealed.

Tape the joints and seams where panels butt together

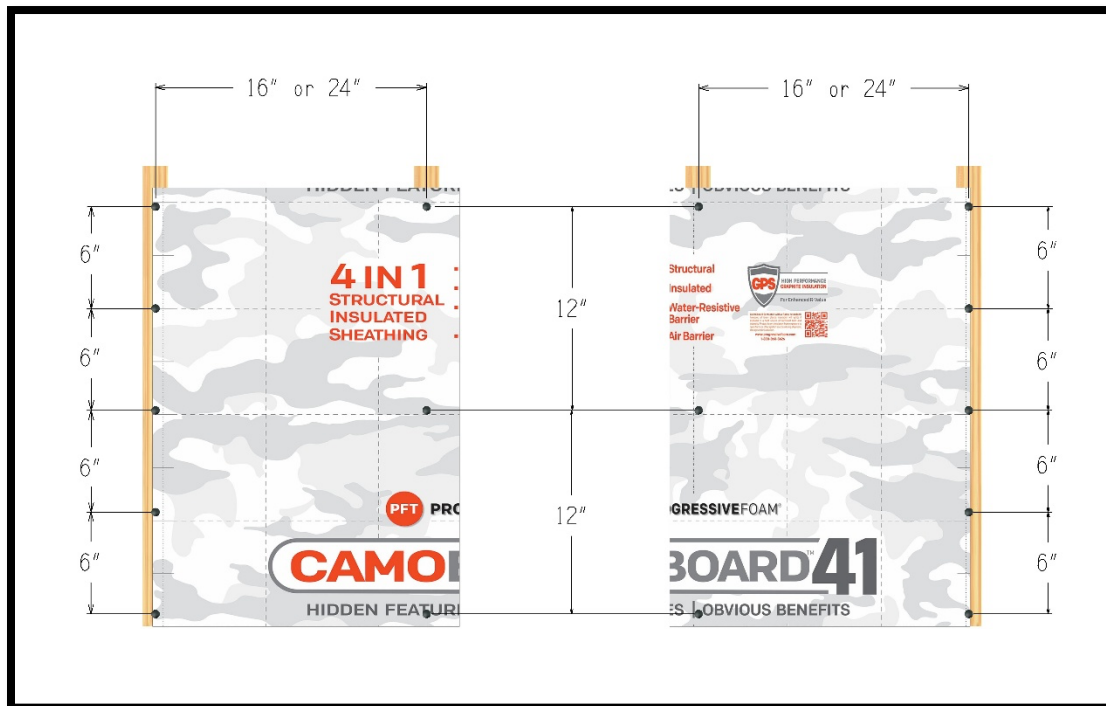


Nail penetrations in the “field” of the panel do not need to be taped



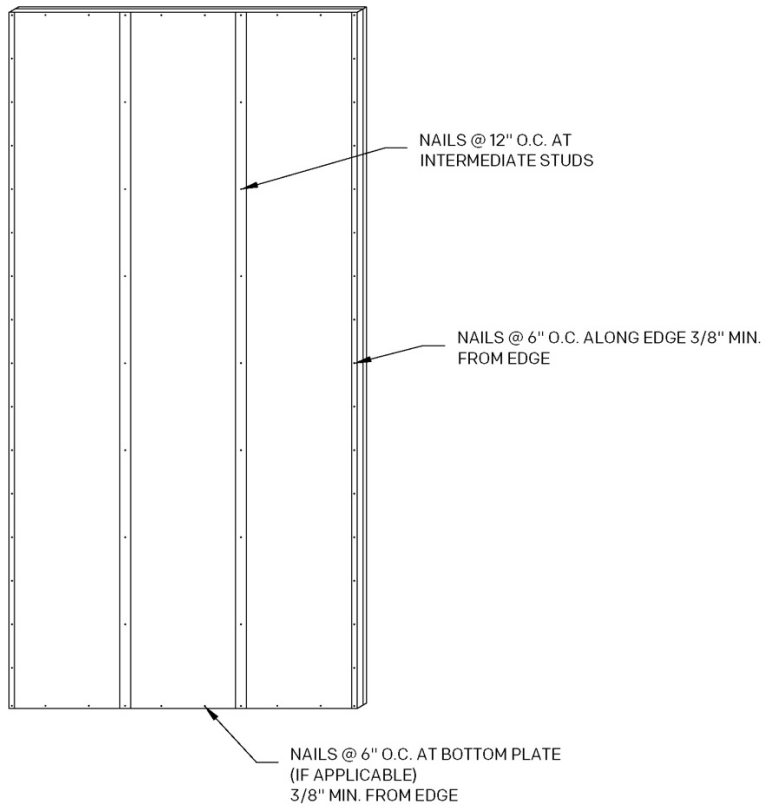
6.2 FASTENING CAMOBOARD:

- 6.2.1 Attach CAMOBOARD to framing with a maximum of 6" o.c. (152mm) between fasteners along the edge and 12" o.c. (304mm) between fasteners in the field. Fasteners shall be a minimum of 0.113" x 2-3/8" nails with a 1" minimum embedment into studs. Nails shall be countersunk into the foam where the nail head is flush with the structural backer. Fastener edge distance is a minimum of 3/8" (9.5mm).
- 6.2.2 Where hold-down straps are used, install structural sheathing first, remove foam at the strap's location, then install the strap over the face of the structural sheathing backer and attach per the manufacturer's installation instructions. Replace foam if possible and seal with tape.
- 6.2.3 Gypsum wallboard shall be a minimum 1/2" in thickness and installed to the interior of the wall framing, with a minimum of #6 x 1-1/4" Type W or S screws or 5d cooler nails. The fastener spacing shall be a maximum of 8" o.c. (76 mm) along the edges and in the field. Fastener edge distance for gypsum wallboard is a minimum of 3/8" (9.5mm).
- 6.2.4 Do not tack CAMOBOARD to framing; fasten each panel completely once fastening begins.

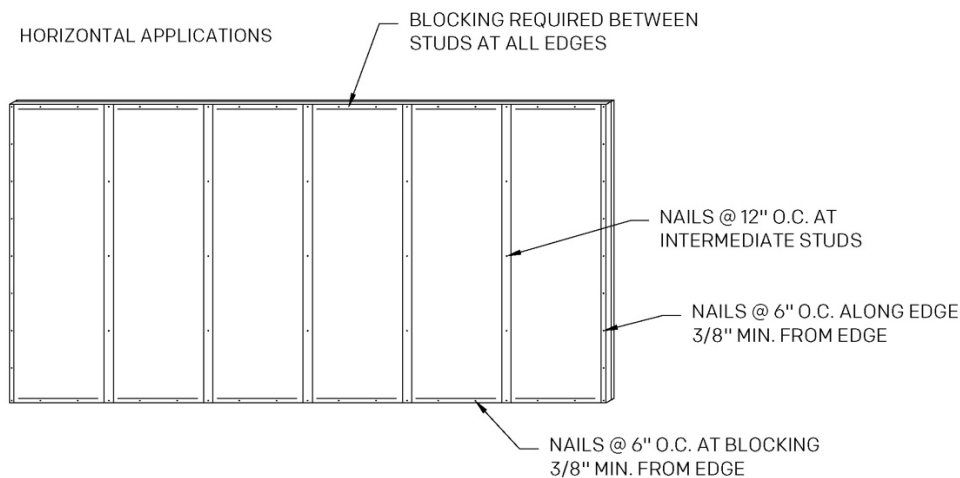


CAMOBOARD FASTENING INSTALLATION DETAIL

VERTICAL APPLICATIONS



HORIZONTAL APPLICATIONS



6.3 LIMITATIONS: CAMOBOARD panels and joint sealant tape should be installed at temperatures between 0° F and 120° F (-17° C and 48° C).

7.0 **Installation Instructions: Fastener Types and Nailing Patterns and Joint Sealing**

Fasteners with washers are recommended to ensure maximum security to the wall substrate.

- 7.1 JOINT FASTENING: CAMOBOARD panels should be sealed so that a proper water-resistive barrier (WRB) is achieved. PFT Construction Seam Tape [or an approved AAMA 711 Tape or Flashing] must be used to qualify as an approved WRB.
 - 7.1.1 Sealant cannot replace the Tape for Joint Sealing.
 - 7.1.2 Nail Penetrations: To maintain the WRB protective layer, all penetrations shall be covered with an approved AAMA 711 Tape or an approved AAMA 713 Sealant to maintain WRB status.
- 7.2 NAIL PENETRATION DEPTH
 - 7.2.1 Nails must be properly set to the outward-facing wood sheathing. The head of the nail shall be seated directly onto the wood sheathing. No gaps between the nail head and the wood sheathing shall be detected. 2 3/8" [two and three-eighths inch] nails shall be used with each thickness of CAMOBOARD.
 - 7.2.2 A depth gauge can be used to determine whether the nails are seated in the wood.
- 7.3 CUTTING CAMOBOARD PANELS: Panels can be cut using a standard wood composite panel cutting blade. While cutting CAMOBOARD, ensure a straight and clean-cut line.

8.0 Nail Gun User Instructions

The Nail Gun has been uniquely designed to pair with CAMOBOARD, providing nozzle tips for the R-3 [3.5], R-5 [5.5], and R7.5 [8.0] Designs. Use a test section to dial in the air compression rating.

8.1 NAIL GUN

8.1.1 Opening the Box [contents]

8.1.1.1 Turbo with Regulator Gauge: this is not installed directly on the gun out of the box. Simply twist the turbo [black cylinder] onto the handle end of the Nail Gun.



8.1.1.2 Nail Base Foot: Included are 3 (three) nail base foot depth control attachments. Each foot is labeled according to the specific CAMOBOARD product thicknesses [R3, R5, and R7.5].



8.1.1.3 Trigger: Assembled on the Gun is the BUMP Trigger (black trigger), and an optional single shot trigger (orange).



8.1.1.4 Depth Gauge: Used to measure nail depth penetrations - details and instruction attached to depth gauge packaging.



8.1.1.5 Oil: Oil and lubricant instructions are provided to maintain high performance.



8.1.1.6 Nail Gun Manufacturers Manual: A maintenance and care instruction pamphlet is included, please read.

8.1.1.7 PFT CAMOBOARD Installation Instructions:

8.1.2 **Nail Gun Pressure Setting:**

8.1.2.1 Start with 70 -120 psi [pounds per square inch]. May need to test some areas of the product to dial in the specific air pressure before starting the job.

8.1.2.2 The head of the nail shall be seated on the face of the OSB sheathing. This ensures the panel is securely fastened to meet building standards.

8.1.2.3 A Depth Gauge [provided in each Nail Gun Box] can be used to check the depth of the nail.

9.0 Installation Instructions: Inspection and Product Repairs

PFT Products are designed to be tough, durable, and last a lifetime. However, job sites can be hazardous during the installation process. Below are a few tips to ensure the maximum performance of the CAMOBOARD Sheets before they are covered with exterior cladding.

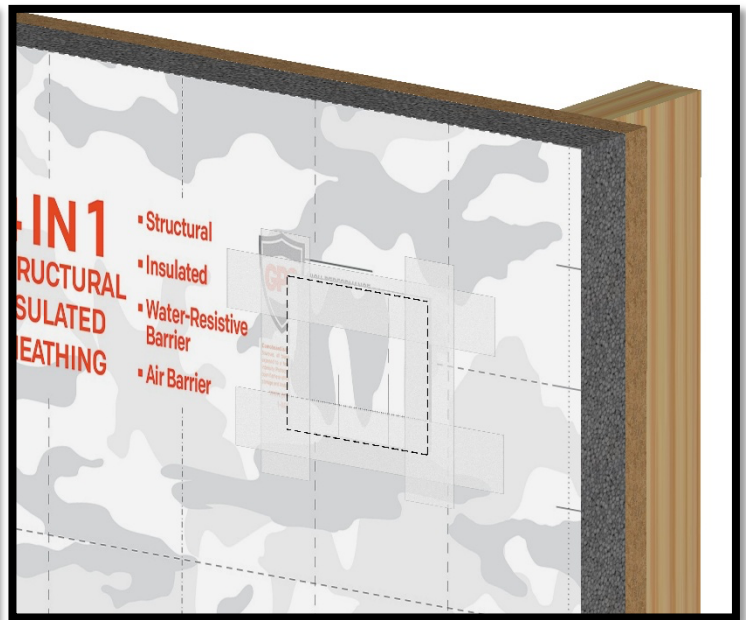
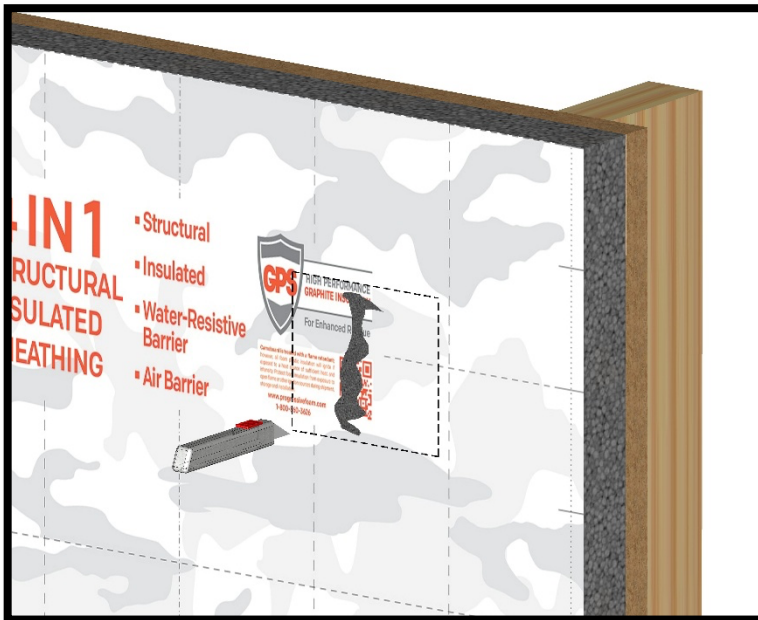
- Review the installation to ensure the boards are properly installed.
- Look for rips or tears in the taped seams.
- Look for damaged areas and mark them for repair.

9.1 Repairs

9.1.1 Safely cut around the damaged area and remove the damaged product.

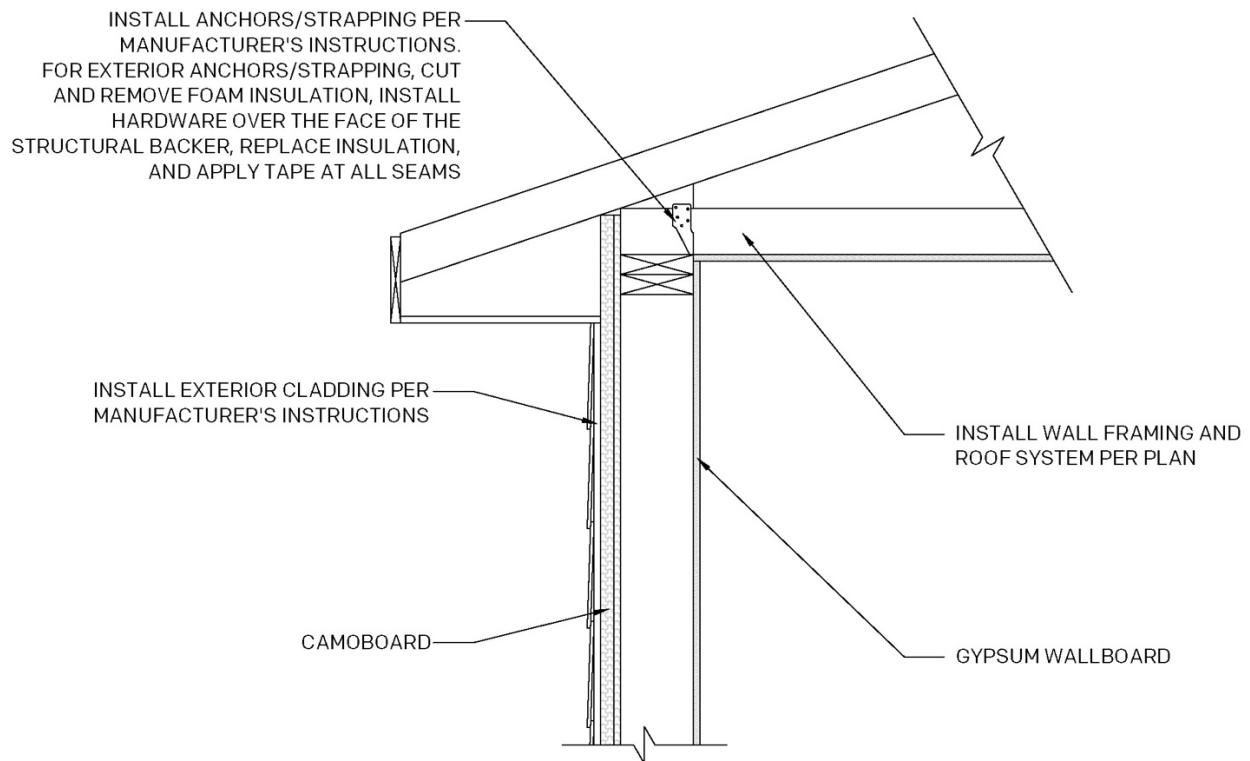
9.1.1.1 Replace the damaged section of the board with a snug-fitting new section. Tape all penetrations and fasteners of the replaced product with the approved Joint Tape.

9.1.1.2 If the damage is minor and can be covered by a single layer of tape, tape over the damage and smooth the edges for desired results.

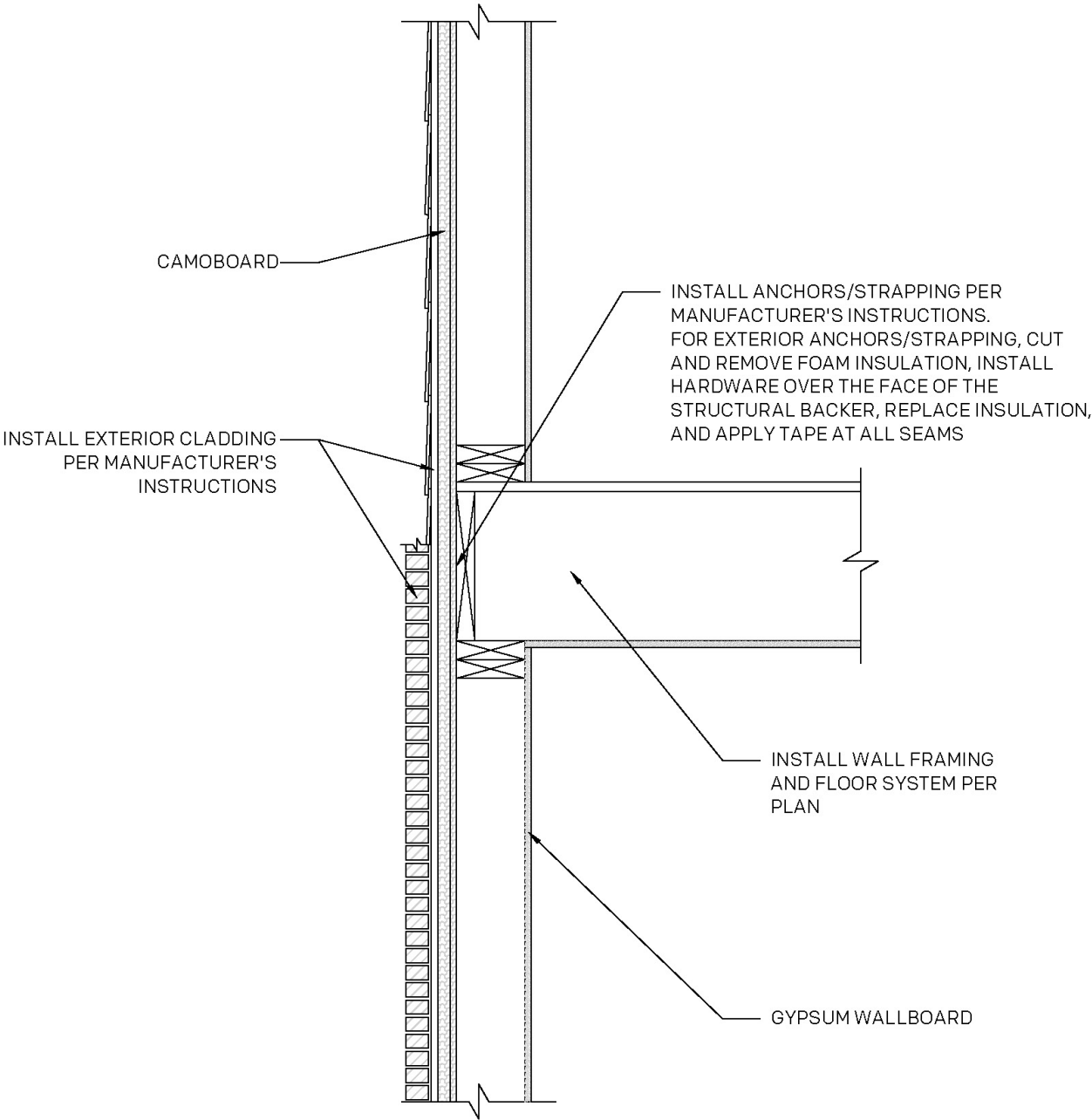


10.0 Example Wall Section Details

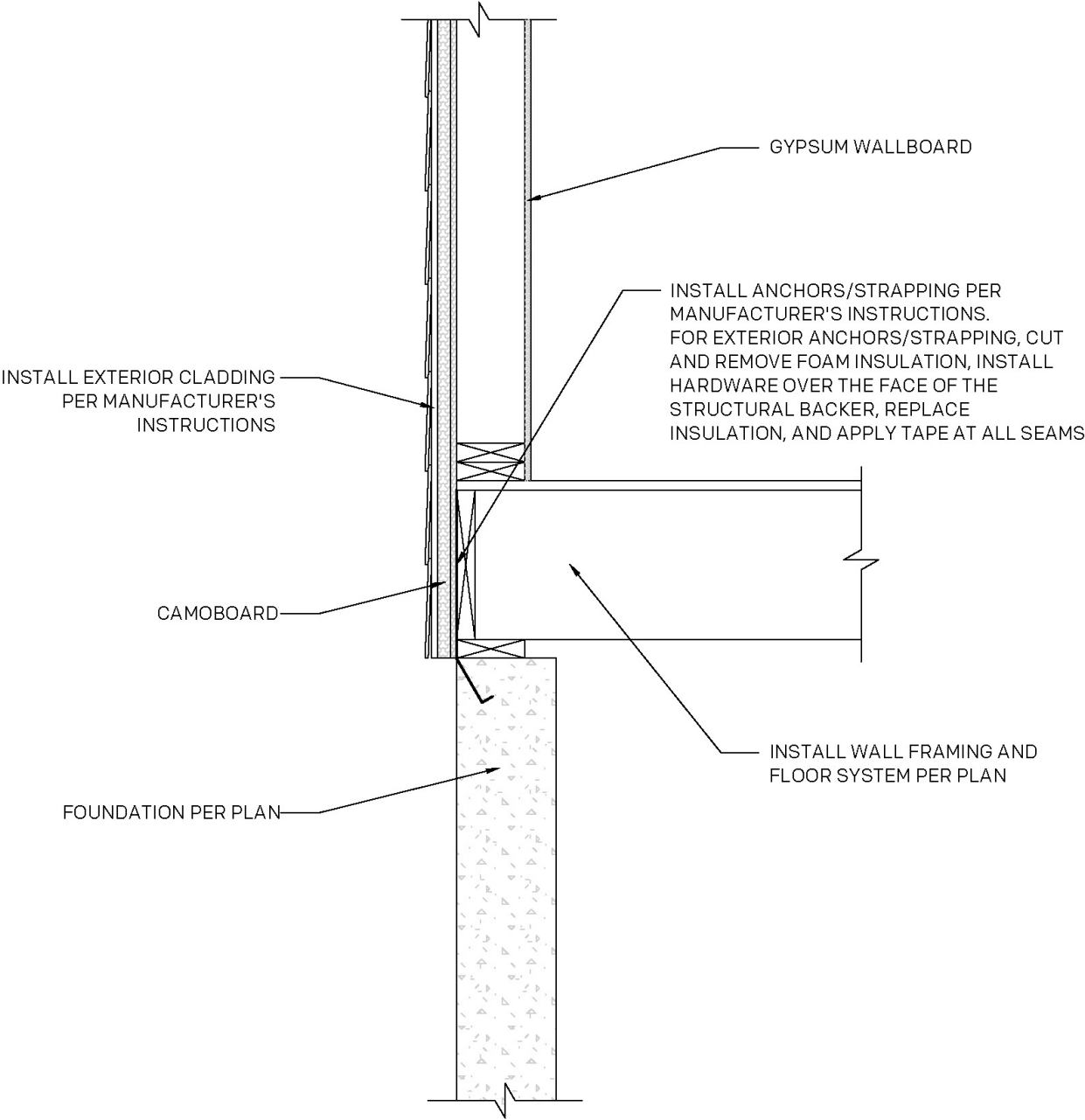
TYPICAL WALL SECTION AT ROOF



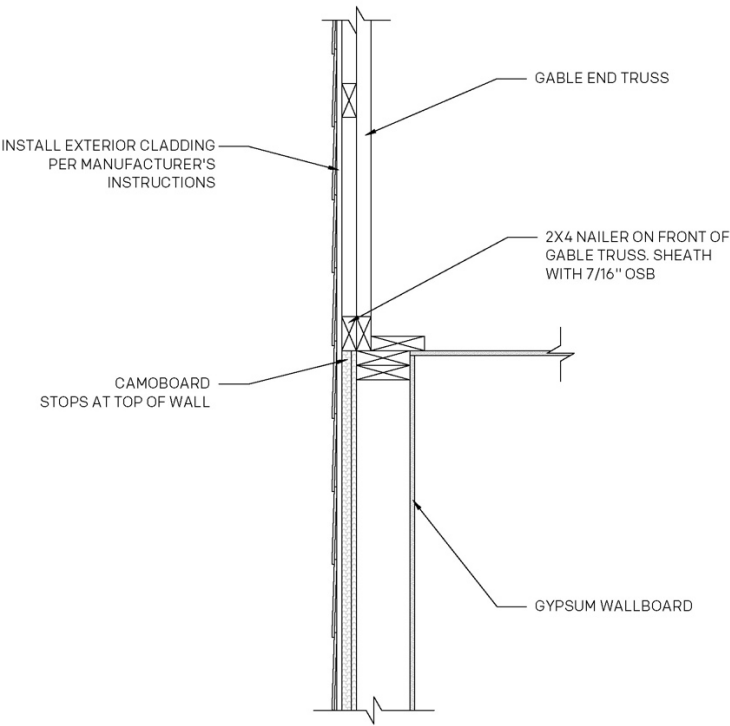
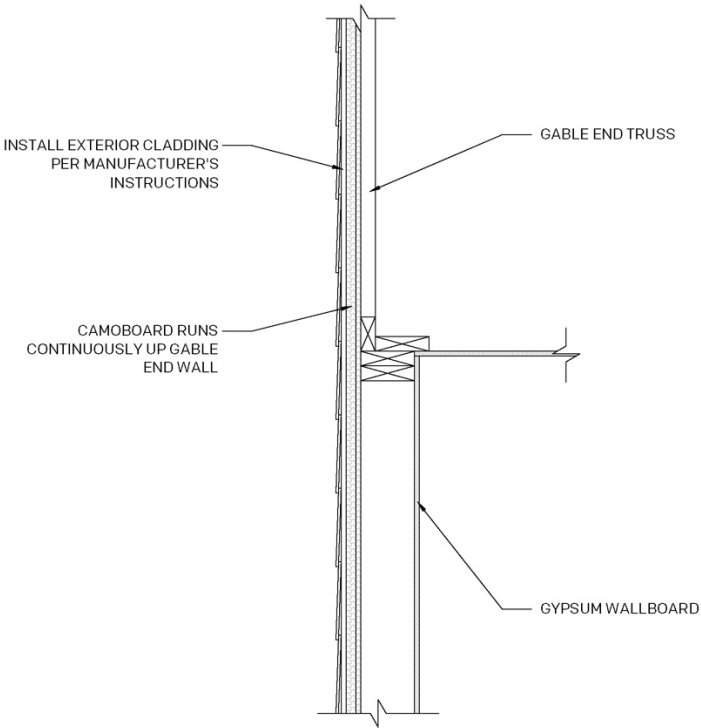
TYPICAL WALL SECTION AT FLOOR DECK



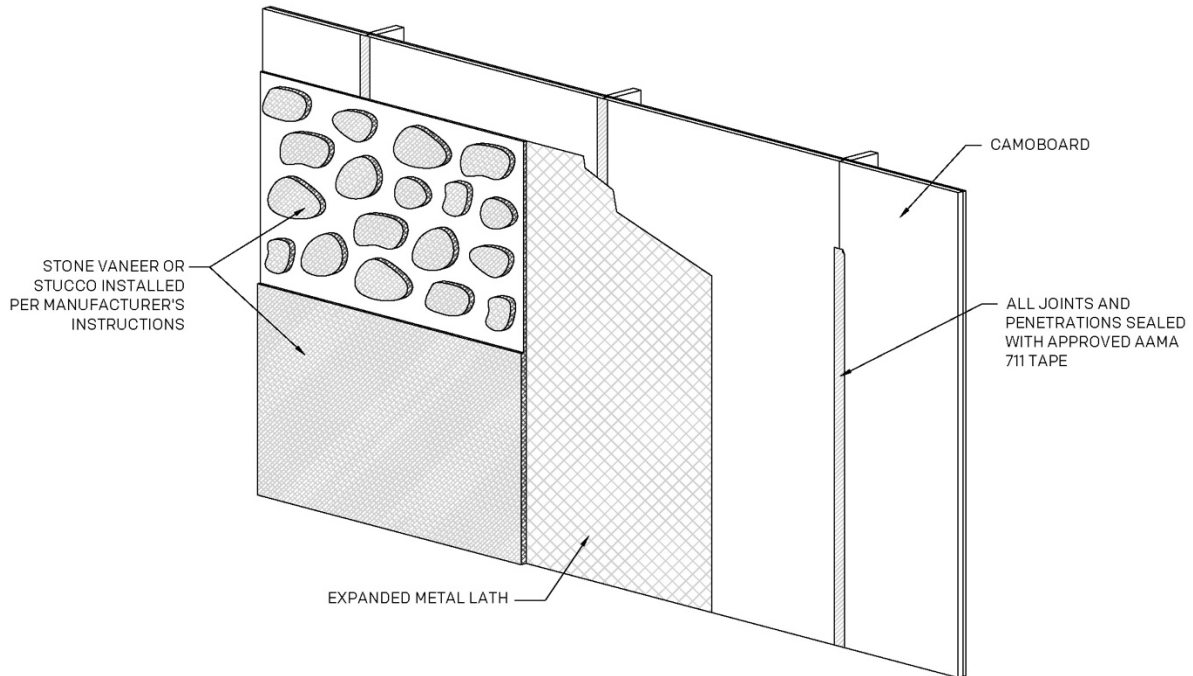
TYPICAL WALL SECTION AT FOUNDATION



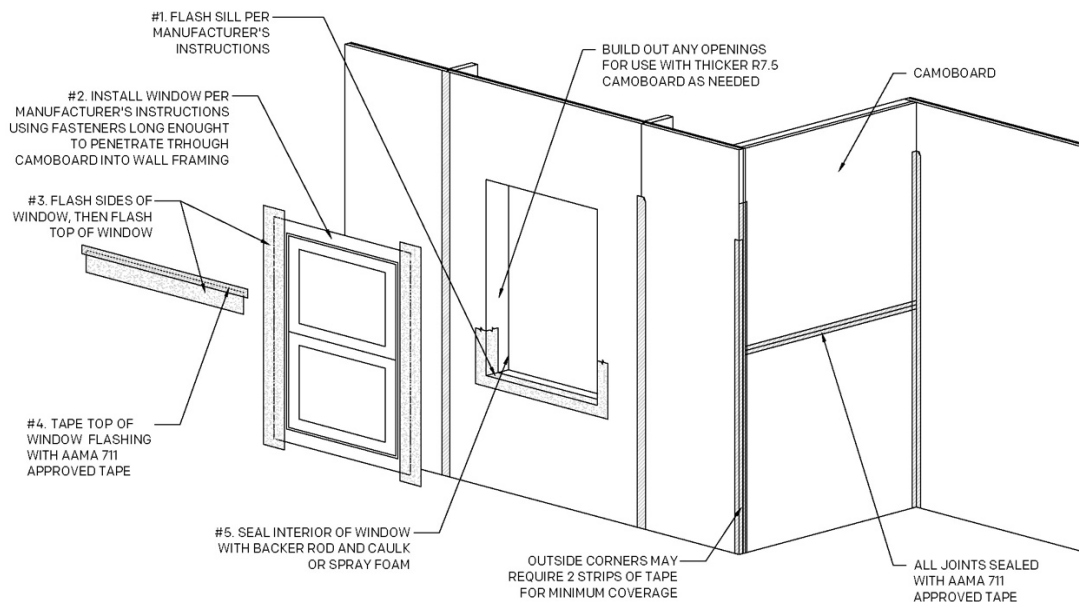
OPTIONAL WALL SECTIONS GABLE END WALL AT ROOF TRUSS



STONE AND STUCCO DETAIL



WINDOW AND TAPE DETAILS



11.0 Simplified Bracing Tables for CAMOBOARD Structural Insulated Sheathing

Simplified Bracing Tables for 7/16" OSB and 15/32" FR Plywood are shown in Tables 1 and 2. See TER-2406-111 for more details.

TABLE 1. CAMOBOARD SIS 7/16" OSB, Simplified Bracing Table – Foam Out Orientation^{1,2,3,4,5,6,7}

Structural Sheathing Product	Ultimate Design Wind Speed, V_{ult} (mph)	Story Level	Eave to Ridge Height (ft)	Minimum Number of Bracing Units Required (Long Side)						Minimum Number of Bracing Units Required (Short Side)					
				Length of Short Side (ft)						Length of Long Side (ft)					
				10	20	30	40	50	60	10	20	30	40	50	60
CAMOBOARD SIS (Foam Out) 7/16" OSB	115	One Story or Top of Two or Three Stories	10	1	1	2	2	2	3	1	1	2	2	2	3
		First of Two Story or Second of Three Stories		1	2	3	3	4	5	1	2	3	3	4	5
		First of Three Stories		2	3	4	5	6	7	2	3	4	5	6	7
		One Story or Top of Two or Three Stories	15	1	1	3	3	3	4	1	1	3	3	3	4
		First of Two Story or Second of Three Stories		1	2	3	3	5	6	1	2	3	3	5	6
		First of Three Stories		2	3	4	6	7	8	2	3	4	6	7	8
	130	One Story or Top of Two or Three Stories	10	1	2	2	2	3	3	1	2	2	2	3	3
		First of Two Story or Second of Three Stories		2	2	3	4	5	6	2	2	3	4	5	6
		First of Three Stories		2	3	5	6	7	8	2	3	5	6	7	8
		One Story or Top of Two or Three Stories	15	1	3	3	3	4	4	1	3	3	3	4	4
		First of Two Story or Second of Three Stories		2	2	3	5	6	7	2	2	3	5	6	7
		First of Three Stories		2	3	6	7	8	9	2	3	6	7	8	9

SI: 1 in = 25.4 mm

1. This simplified bracing table is based on the provisions of IRC Section R602.12. All provisions therein shall be observed, except that this table shall replace IRC Table R602.12.4, and CAMOBOARD® SIS shall replace the sheathing material.
2. CAMOBOARD® SIS installed with butted joints on 2x4 studs spaced 24" o.c. maximum and fastened with minimum 0.113" x 2-3/8" nails installed 6" o.c. along the edges and 12" o.c. in the field. Fastener edge distance shall be a minimum of 3/8". Nails with a head diameter and length greater than the 0.113" x 2-3/8" nails are also permissible.
3. Minimum 1/2" gypsum wallboard (light-weight minimum) shall be fastened to the interior side of the wall with minimum #6 x 1-1/4" Type W or S screws installed 8" o.c. along the edges and 8" o.c. in the field.
4. Interpolation shall not be permitted.
5. Cripple walls or wood-framed basement walls in a walk-out condition shall be designated as the first story and the stories above shall be re-designated as the second and third stories respectively, and shall be prohibited in a three-story structure.
6. Actual lengths of the sides of the circumscribed rectangle shall be rounded to the next highest unit of 10 when using this table.
7. For Exposure Category C, multiply bracing units by a factor of 1.20 for a one-story building, 1.30 for a two-story building, and 1.40 for a three-story building.

TABLE 2. CAMOBOARD SIS ¹⁵/₃₂" Plywood, Simplified Bracing Table – Foam Out Orientation^{1,2,3,4,5,6,7}

Structural Sheathing Product	Ultimate Design Wind Speed, V _{ult} (mph)	Story Level	Eave to Ridge Height (ft)	Minimum Number of Bracing Units Required (Long Side)						Minimum Number of Bracing Units Required (Short Side)					
				Length of Short Side (ft)						Length of Long Side (ft)					
				10	20	30	40	50	60	10	20	30	40	50	60
CAMOBOARD SIS (Foam Out) ¹⁵ / ₃₂ " OSB	115	One Story or Top of Two or Three Stories	10	1	1	2	2	2	3	1	1	2	2	2	3
		First of Two Story or Second of Three Stories		1	2	3	3	4	5	1	2	3	3	4	5
		First of Three Stories		2	3	4	5	6	7	2	3	4	5	6	7
		One Story or Top of Two or Three Stories	15	1	1	3	3	3	4	1	1	3	3	3	4
		First of Two Story or Second of Three Stories		1	2	3	3	5	6	1	2	3	3	5	6
		First of Three Stories		2	3	4	6	7	8	2	3	4	6	7	8
	130	One Story or Top of Two or Three Stories	10	1	2	2	2	3	3	1	2	2	2	3	3
		First of Two Story or Second of Three Stories		2	3	3	4	5	6	2	3	3	4	5	6
		First of Three Stories		2	3	5	6	7	9	2	3	5	6	7	9
		One Story or Top of Two or Three Stories	15	1	3	3	3	4	4	1	3	3	3	4	4
		First of Two Story or Second of Three Stories		2	3	3	5	6	7	2	3	3	5	6	7
		First of Three Stories		2	3	6	7	8	10	2	3	6	7	8	10

SI: 1 in = 25.4 mm

1. This simplified bracing table is based on the provisions of IRC Section R602.12. All provisions therein shall be observed, except that this table shall replace IRC Table R602.12.4, and CAMOBOARD® SIS shall replace the sheathing material.
2. CAMOBOARD® SIS installed with butted joints on 2x4 studs spaced 24" o.c. maximum and fastened with minimum 0.113" x 2-3/8" nails installed 6" o.c. along the edges and 12" o.c. in the field. Fastener edge distance shall be a minimum of 3/8". Nails with a head diameter and length greater than the 0.113" x 2-3/8" nails are also permissible.
3. Minimum 1/2" gypsum wallboard (light-weight minimum) shall be fastened to the interior side of the wall with minimum #6 x 1-1/4" Type W or S screws installed 8" o.c. along the edges and 8" o.c. in the field.
4. Interpolation shall not be permitted.
5. Cripple walls or wood-framed basement walls in a walk-out condition shall be designated as the first story and the stories above shall be re-designated as the second and third stories respectively, and shall be prohibited in a three-story structure.
6. Actual lengths of the sides of the circumscribed rectangle shall be rounded to the next highest unit of 10 when using this table.
7. For Exposure Category C, multiply bracing units by a factor of 1.20 for a one-story building, 1.30 for a two-story building, and 1.40 for a three-story building.

12.0 **Warranty**

The full warranty can be found at www.progressivefoam.com

13.0 **Disclaimer and Limitation of Liability**

The statements and data contained in this document prepared by Progressive Foam Technologies, Inc. (PFT) are for general information purposes ONLY. They are NOT specific technical recommendations as to any particular design or application and the ultimate determination as to product suitability is the sole responsibility of the installer or end user. However, for any PFT product to properly perform, it must be explicitly installed in the manner described herein. Any warranty is void if there is any deviance from these installation instructions, or any use of PFT products in any other manner unless described herein and will not be honored by PFT. All warranties, conditions and other terms implied by statute or common law are excluded to the maximum extent permitted by applicable laws. Unless expressly provided, this Web Site and the information and products and services available on is delivered "as is" without warranty of any kind. We do not warrant or represent that the products and services (or the information, material or services supplied to us on which all or part of the products and services depends) will be delivered free of any inaccuracies, interruptions, delays, omissions or errors ("Faults"), or that all Faults will be corrected. We shall not be liable for any loss, damage or cost resulting from any such Faults. You assume sole responsibility and entire risk as to the suitability and results obtained from use of the products and services, and any decisions made or actions taken based on the information contained in or generated by the Service. You are solely responsible for the preparation, content, accuracy and review of any documents, data, or output prepared or resulting from the use of the products and services. In no event shall PFT or its third-party providers be liable for any penalties, interest or taxes assessed by any governmental or regulatory authority. Although the information herein, including PFT product descriptions, is believed to be correct at the time of publication, accuracy cannot be guaranteed, and results may vary depending on the design and/or application. PFT fully reserves the right to make product specification changes, without notice or obligation, and to modify or discontinue any of its products at any time. In no event shall PFT be liable for any direct, indirect, or consequential damages of any kind arising from information contained in this bulletin, including, but not limited to, claims for loss of profits, business interruption, or damage to business reputation. This limitation of liability shall apply to all claims whether those claims are based in contract, tort, or any legal cause of action. When penetrating or adhering to a PFT product, PFT recommends referring to the attachment and membrane manufacturers to secure additional direction on the installation method and material compatibility. Fastening connections should be designed to withstand all the combined applied loads, including but not limited to dead-load and wind-load. Where applicable, consideration should be given to seismic load, and live load (not covered in this guide). It is the responsibility of the manufacturers of fastenings or adhesives to comment on the performance of their products when managing the loads of PFT insulation materials and other assembly components. PFT makes no representations or warranties, express or implied, with respect to its recommendations for attaching the semi-rigid and rigid board products and all warranties are disclaimed.

CONTACT US

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